APPROVED

1/5/2022 , 2021-83

PLANNING DIVISION

AT&T SITE NUMBER: **SD0453**

AT&T SITE NAME: **MANCHESTER**

2775 CAMINITO OCEAN COVE

CARDIFF BY THE SEA, CA 92007

33° 0' 48.77" N (33.0135470)

AT&T FA LOCATION CODE: 10086163

AT&T PROJECT: LTE 5C/LTE 3C/4TX4RX/LTE 4C/ 5G NR 1DR-1

AT&T PACE #: MRSDL018593/MRSDL032148/MRSDL032139/MRSDL032134/

MRSDL032142/MRSDL032152

BUSINESS UNIT #:

San Elijo Water 🞧

Reclamation

SITE ADDRESS: COUNTY: SITE TYPE:

TOWER HEIGHT:

LOCATION MAP

815314

2775 CAMINITO OCEAN COVE CARDIFF BY THE SEA, CA 92007

SAN DIEGO **MONOPOLE**

17'-0"

MiraCosta College



200 SPECTRUM CENTER DRIVE

SUITE 1700 & 1800

IRVINE, CA 92618

at&t

CROWN

CASTLE

575 MOROSGO DRIVE ATLANTA, GA 30324

RFDS DATED 12/20/13 v1.00

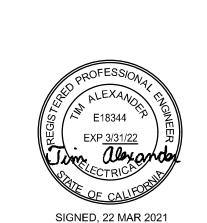
AT&T SITE NUMBER: **SD0453**

BU #: **815314 MANCHESTER**

2775 CAMINITO OCEAN COVE CARDIFF BY THE SEA, CA 92007

EXISTING 17'-0" MONOPOLE

	ISSUED FOR:								
REV	DATE	DRWN	DESCRIPTION	DES./QA					
A	3/10/20	AK	PRELIMINARY CDs	JD					
В	4/15/20	JD	CLIENT REVISIONS	CW					
С	8/05/20	APR	CLIENT REVISIONS	CW					
0	9/15/20	AK	SUBMITTAL CD	CW					
1a	3/22/21	CW	CLIENT REVISIONS	CW					



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.



REVISION

SITE INFORMATION

MANCHESTER

EXISTING

CROWN CASTLE USA INC.

SITE NAME:

SITE ADDRESS:

SAN DIEGO COUNTY: MAP/PARCEL#: 261-020-25

AREA OF CONSTRUCTION: LATITUDE:

117° 16' 9.77" W (-117.2693810) LONGITUDE: LAT/LONG TYPE: NAD83 GROUND ELEVATION: 164'-0"

CURRENT ZONING: JURISDICTION: CITY OF ENCINITAS

OCCUPANCY CLASSIFICATION: U

TYPE OF CONSTRUCTION:

A.D.A. COMPLIANCE: FACILITY IS UNMANNED AND NOT FOR **HUMAN HABITATION**

PROPERTY OWNER: SAN DIEGUITO WATER DISTRICT/ PUBLIC

> **AGENCY** 160 CALLE MAGDALENA

> > IRVINE, CA 92618

800-611-7343

PROJECT TEAM

CWOLFE@TELCYTE.COM

SARAH KIM - A&E SPECIALIST

MESA, AZ 85215

IRVINE, CA 92618

(949) 344-7838

(702) 408-5147

(949) 936-0038

T.B.D.

TELCYTE INFRASTRUCTURE SERVICES

3450 N. HIGLEY RD - BLDG 2, SUITE 102

200 SPECTRUM CENTER DRIVE, SUITE 1700 & 1800

ROBERT VERDUGO - PROJECT MANAGER

LUKE CHRISTIAN - CONSTRUCTION MANAGER

ENCINITAS, CA 92024

TOWER OWNER: CROWN CASTLE 200 SPECTRUM CENTER DR, SUITE 1700 & 1800

CARRIER/APPLICANT:

A&E FIRM:

CROWN CASTLE

AT&T MOBILITY

CONTACT:

DISTRICT CONTACTS:

AT&T 1025 LENOX PARK BLVD 3RD FLOOR

AT&T TOWER ASSET GROUP ATLANTA, GA 30319

ELECTRIC PROVIDER: SAN DIEGO GAS & ELECTRIC

TELCO PROVIDER: AT&T 800.331.0500

DRAWING INDEX SHEET# SHEET DESCRIPTION TITLE SHEET GENERAL NOTES OVERALL SITE PLAN EXISTING & FINAL EQUIPMENT PLANS TOWER ELEVATIONS TOWER ELEVATIONS ANTENNA PLANS & EQUIPMENT SCHEDULES EQUIPMENT SPECS EQUIPMENT SPECS ELECTRICAL DIAGRAM GROUNDING DETAILS ATTACHED BOULDER STEALTHING

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED F AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.



CALL CALIFORNIA ONE CALL (800) 227-2600

> CALL 3 WORKING DAYS BEFORE YOU DIG!



PROJECT DESCRIPTION THE PURPOSE OF THIS PROJECT IS TO ENHANCE

BROADBAND CONNECTIVITY AND CAPACITY TO THE EXISTING ELIGIBLE WIRELESS FACILITY.

TOWER SCOPE OF WORK:

- REMOVE (4) (E) PANEL ANTENNAS
- RELOCATE (2) (E) PANEL ANTENNA
- RELOCATE (2) (E) TMAs • INSTALL (6) (N) PANEL ANTENNAS
- REMOVE (4) (E) RRUs
- INSTALL (8) RRUs
- INSTALL (4) T- ARM MOUNTS
- INSTALL (1) DC9 SURGE SUPPRESSOR
- INSTALL (40) FIBER JUMPERS
- INSTALL (2) $\frac{7}{8}$ " COAX

GROUND SCOPE OF WORK:

- REMOVE (1) POWER PLANT
- INSTALL (1) POWER PLANT W/ (8) RECTIFIERS & (2) CONVERTERS
- REMOVE (2) RRUs
- REMOVE (1) STRING OF EXISTING +24V ABSOLYTE BATTERIES
- INSTALL (1) NEW SEISMIC-RATED BATTERY RACK WITH (12) CELLS OF POWERSAFE ENERSYS 190-AMP-HOUR BATTERIES
- INSTALL (4) DC POWER TRUNKS, MIN #6 AWG
- INSTALL (1) 24-PAIR FIBER TRUNK

APPLICABLE CODES/REFERENCE DOCUMENTS

NO SCALE

San Elijo

Lagoon

State Marine...

Americas Finest Carpet

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED I THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

CODE TYPE BUILDING

cific Coast Grill W The Kraker

Las Olas

Cardiff 👩

State Beach

Chart House

2019 CALIFORNIA BUILDING CODE/2018 IBC 2019 CALIFORNIA MECHANICAL CODE/2018 UMC **MECHANICAL** ELECTRICAL 2019 CALIFORNIA ELECTRICAL CODE/2017 NEC

REFERENCE DOCUMENTS:

STRUCTURAL ANALYSIS: BY CROWN CASTLE

DATED: 05/14/20

MOUNT ANALYSIS: BY SOLAR COMMUNICATIONS INTERNATIONAL, INC.

RFDS REVISION: 1.00 DATED: 12/20/13

ORDER ID: PENDING REVISION: PENDING

PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE CROWN NOC AT (800) 788-7011 & CROWN CONSTRUCTION MANAGER.

APPROVALS THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND

AUTHORIZE THE SUBCONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HEREIN. ALL CONSTRUCTION DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND ANY CHANGES AND MODIFICATIONS THEY MAY IMPOSE.

AT&T RF ENGINEER	DATE
AT&T OPERATIONS	DATE
SITE ACQUISITION	DATE
CONSTRUCTION MANAGER	DATE
PROPERTY OWNER	DATE
ZONING	DATE
PROJECT MANAGER	DATE

DATED: 09/09/2014.

CROWN CASTLE USA INC. SITE ACTIVITY REQUIREMENTS:

- NOTICE TO PROCEED- NO WORK SHALL COMMENCE PRIOR TO CROWN CASTLE USA INC. WRITTEN NOTICE TO PROCEED (NTP) AND THE ISSUANCE OF A PURCHASE ORDER. PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE CROWN CASTLE USA INC. NOC AT 800-788-7011 & THE CROWN CASTLE USA INC. CONSTRUCTION MANAGER.
- "LOOK UP" CROWN CASTLE USA INC. SAFETY CLIMB REQUIREMENT
- THE INTEGRITY OF THE SAFETY CLIMB AND ALL COMPONENTS OF THE CLIMBING FACILITY SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. TOWER MODIFICATION, MOUNT REINFORCEMENTS, AND/OR EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF THE SAFETY CLIMB OR ANY COMPONENTS OF THE CLIMBING FACILITY ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING OF THE WIRE ROPE FROM ITS SUPPORTS, DIRECT CONTACT OR CLOSE PROXIMITY TO THE WIRE ROPE WHICH MAY CAUSE FRICTIONAL WEAR, IMPACT TO THE ANCHORAGE POINTS IN ANY WAY, OR TO IMPEDE/BLOCK ITS INTENDED USE. ANY COMPROMISED SAFETY CLIMB, INCLUDING EXISTING CONDITIONS MUST BE TAGGED OUT AND REPORTED TO YOUR CROWN CASTLE USA INC. POC OR CALL THE NOC TO GENERATE A SAFETY CLIMB MAINTENANCE AND CONTRACTOR NOTICE TICKET.
- PRIOR TO THE START OF CONSTRUCTION, ALL REQUIRED JURISDICTIONAL PERMITS SHALL BE OBTAINED. THIS INCLUDES, BUT IS NOT LIMITED TO, BUILDING, ELECTRICAL, MECHANICAL, FIRE, FLOOD ZONE, ENVIRONMENTAL, AND ZONING. AFTER ONSITE ACTIVITIES AND CONSTRUCTION ARE COMPLETED, ALL REQUIRED PERMITS SHALL BE SATISFIED AND CLOSED OUT ACCORDING TO LOCAL JURISDICTIONAL REQUIREMENTS.
- ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN, AND SHALL MEET ANSI/ASSE A10.48 (LATEST EDITION); FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) AND CROWN CASTLE USA INC. STANDARD CED-STD-10253, INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION, TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH ANSI/TIA-322 (LATEST EDITION).
- ALL SITE WORK TO COMPLY WITH QAS-STD-10068 "INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES ON CROWN CASTLE USA INC. TOWER SITE" AND LATEST VERSION OF ANSI/TIA-1019-A-2012 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS."
- IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY CROWN CASTLE USA INC. PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES, CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES. REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION E) CONSTRUCTION SAFETY PROCEDURES.
- 11. ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND PROJECT SPECIFICATIONS, LATEST APPROVED REVISION.
- 12. CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH AT THE COMPLETION OF THE WORK. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- 13. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, TOWER OWNER, CROWN CASTLE USA INC., AND/OR LOCAL UTILITIES.
- 14. THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE REQUIRED BY LOCAL JURISDICTION AND SIGNAGE REQUIRED ON INDIVIDUAL PIECES OF EQUIPMENT, ROOMS, AND SHELTERS.
- 15. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE CARRIER'S EQUIPMENT AND TOWER AREAS. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION
- 17. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED ON THE CONSTRUCTION DRAWINGS
- CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL
- 19. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
- 20. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
- 21. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY
- NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

GENERAL NOTES:

- FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY: CONTRACTOR: GENERAL CONTRACTOR RESPONSIBLE FOR CONSTRUCTION CARRIER:
- TOWER OWNER: CROWN CASTLE USA INC.
- THESE DRAWINGS HAVE BEEN PREPARED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE ENGINEERS IN THIS OR SIMILAR LOCALITIES. IT IS ASSUMED THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND/OR WORKPEOPLE WHO HAVE A WORKING KNOWLEDGE OF THE APPLICABLE CODE STANDARDS AND REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.
- THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE MEANS OR METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY FOR PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, FORMWORK, SHORING, ETC. SITE VISITS BY THE ENGINEER OR HIS REPRESENTATIVE WILL NOT INCLUDE INSPECTION OF THESE ITEMS AND IS FOR STRUCTURAL OBSERVATION
- NOTES AND DETAILS IN THE CONSTRUCTION DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES. AND SPECIFICATIONS, THE GREATER, MORE STRICT REQUIREMENTS, SHALL GOVERN. IF FURTHER CLARIFICATION IS REQUIRED CONTACT THE ENGINEER OF RECORD.
- SUBSTANTIAL EFFORT HAS BEEN MADE TO PROVIDE ACCURATE DIMENSIONS AND MEASUREMENTS ON THE DRAWINGS TO ASSIST IN THE FABRICATION AND/OR PLACEMENT OF CONSTRUCTION ELEMENTS BUT IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE DIMENSIONS, MEASUREMENTS, AND/OR CLEARANCES SHOWN IN THE CONSTRUCTION DRAWINGS PRIOR TO FABRICATION OR CUTTING OF ANY NEW OR EXISTING CONSTRUCTION ELEMENTS. IF IT IS DETERMINED THAT THERE ARE DISCREPANCIES AND/OR CONFLICTS WITH THE CONSTRUCTION DRAWINGS THE ENGINEER OF RECORD IS TO BE NOTIFIED AS SOON AS POSSIBLE
- PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CROWN CASTLE.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CARRIER AND CROWN CASTLE PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
- 11. CONTRACTOR IS TO PERFORM A SITE INVESTIGATION AND IS TO DETERMINE THE BEST ROUTING OF ALL CONDUITS FOR POWER, AND TELCO AND FOR GROUNDING CABLES AS SHOWN IN THE POWER, TELCO, AND GROUNDING PLAN DRAWINGS.
- 12. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF CROWN CASTLE USA INC.
- 13. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION. 14. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY

CONCRETE, FOUNDATIONS, AND REINFORCING STEEL

- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
- UNLESS NOTED OTHERWISE, SOIL BEARING PRESSURE USED FOR DESIGN OF SLABS AND FOUNDATIONS IS ASSUMED TO BE 1000 psf. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (fc) OF 3000 psi AT 28 DAYS, UNLESS NOTED OTHERWISE. NO MORE THAN 90 MINUTES SHALL ELAPSE FROM BATCH TIME TO TIME OF PLACEMENT UNLESS APPROVED BY THE ENGINEER OF
- RECORD. TEMPERATURE OF CONCRETE SHALL NOT EXCEED 90°f AT TIME OF PLACEMENT CONCRETE EXPOSED TO FREEZE-THAW CYCLES SHALL CONTAIN AIR ENTRAINING ADMIXTURES. AMOUNT OF AIR ENTRAINMENT TO BE BASED ON SIZE OF AGGREGATE AND F3 CLASS EXPOSURE (VERY SEVERE). CEMENT USED TO BE TYPE II PORTLAND CEMENT WITH A MAXIMUM WATER-TO-CEMENT RATIO (W/C) OF 0.45.
- ALL STEEL REINFORCING SHALL CONFORM TO ASTM A615. ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185. ALL SPLICES SHALL BE CLASS "B" TENSION SPLICES, UNLESS NOTED OTHERWISE. ALL HOOKS SHALL BE STANDARD 90 DEGREE HOOKS, UNLESS NOTED OTHERWISE. YIELD STRENGTH (Fy) OF STANDARD DEFORMED BARS ARE AS FOLLOWS:
- #4 BARS AND SMALLER 40 ksi #5 BARS AND LARGER 60 ksi THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON
- CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH CONCRETE EXPOSED TO EARTH OR WEATHER: #6 BARS AND LARGER #5 BARS AND SMALLER 1-1/2" CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
- 3/4" SLAB AND WALLS 1-1/2" BEAMS AND COLUMNS
- A TOOLED EDGE OR A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

GREENFIELD GROUNDING NOTES:

- ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION AND AC POWER GES'S) SHALL BE BONDED TOGETHER AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC. THE CONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS, THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO
- THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT AND PROVIDE TESTING RESULTS. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.

METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS

- EACH CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, #6 STRANDED COPPER OR LARGER FOR INDOOR BTS; #2 BARE SOLID TINNED COPPER FOR OUTDOOR BTS.
- CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK CONNECTIONS ON OPPOSITE SIDE OF THE GROUND BUS ARE PERMITTED.
- ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 SOLID TINNED COPPER UNLESS OTHERWISE INDICATED. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
- USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
- ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
- COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
- 14. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR. APPROVED ANTIOXIDANT COATINGS (i.e. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
- ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL
- MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
- BOND ALL METALLIC OBJECTS WITHIN 6 ft OF MAIN GROUND RING WITH (1) #2 BARE SOLID TINNED COPPER GROUND CONDUCTOR.
- GROUND CONDUCTORS USED FOR THE FACILITY GROUNDING AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (i.e., NONMETALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.
- 20. ALL GROUNDS THAT TRANSITION FROM BELOW GRADE TO ABOVE GRADE MUST BE #2 BARE SOLID TINNED COPPER IN 3/4" NON-METALLIC, FLEXIBLE CONDUIT FROM 24" BELOW GRADE TO WITHIN 3" TO 6" OF CAD-WELD TERMINATION POINT. THE EXPOSED END OF THE CONDUIT MUST BE SEALED WITH SILICONE CAULK. (ADD TRANSITIONING GROUND STANDARD DETAIL AS WELL).
- 21. BUILDINGS WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWERS, AND WATER TOWERS GROUNDING RING, TO THE EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 COPPER. ROOFTOP GROUNDING RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY).

ELECTRICAL INSTALLATION NOTES:

- ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE
- FEDERAL, STATE, AND LOCAL CODES/ORDINANCES. CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT
- BLOCKED AND TRIP HAZARDS ARE ELIMINATED.
- WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC. 4. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
- 4.1. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.
- ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING THAT SHALL BE GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED. 20.000 AIC MINIMUM. VERYIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PRE THE GOVERNING JURISDICTION.
- EACH END OF EVERY POWER PHASE CONDUCTOR, GROUNDING CONDUCTOR, AND TELCO CONDUCTOR OR CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2" PLASTIC ELECTRICAL TAPE WITH UV
- PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH LAMICOID TAGS SHOWING THEIR RATED VOLTAGE, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING AND BRANCH CIRCUIT ID NUMBERS (i.e. PANEL BOARD
- PANEL BOARDS (ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS
- ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
- ALL POWER AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE COPPER CONDUCTOR (#14 OR LARGER) WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED. 10. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE COPPER CONDUCTOR (#6 OR LARGER) WITH
- TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED. 11. POWER AND CONTROL WIRING IN FLEXIBLE CORD SHALL BE MULTI-CONDUCTOR, TYPE SOOW CORD (#14 OR LARGER) UNLESS
- OTHERWISE SPECIFIED. 12. POWER AND CONTROL WIRING FOR USE IN CABLE TRAY SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 OR LARGER), WITH
- TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED. 13. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS
- AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION NOT LESS THAN 75° C (90° C IF AVAILABLE). 14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND
- 15. ELECTRICAL METALLIC TUBING (EMT), INTERMEDIATE METAL CONDUIT (IMC), OR RIGID METAL CONDUIT (RMC) SHALL BE USED FOR
- EXPOSED INDOOR LOCATIONS. 16. ELECTRICAL METALLIC TUBING (EMT) OR METAL-CLAD CABLE (MC) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
- 17. SCHEDULE 40 PVC UNDERGROUND ON STRAIGHTS AND SCHEDULE 80 PVC FOR ALL ELBOWS/90s AND ALL APPROVED ABOVE
- 18. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
- 19. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.
- 20. CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND
- 21. WIREWAYS SHALL BE METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS (WIREMOLD SPECMATE WIREWAY). 22. SLOTTED WIRING DUCT SHALL BE PVC AND INCLUDE COVER (PANDUIT TYPE E OR EQUAL).
- 23. CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON-PERFORATED STRAPS AND HANGERS. EXPLOSIVE DEVICES (i.e. POWDER-ACTUATED) FOR ATTACHING HANGERS TO STRUCTURE WILL NOT BE PERMITTED. CLOSELY FOLLOW THE LINES OF THE STRUCTURE, MAINTAIN CLOSE PROXIMITY TO THE STRUCTURE AND KEEP CONDUITS IN TIGHT ENVELOPES. CHANGES IN DIRECTION TO ROUTE AROUND OBSTACLES SHALL BE MADE WITH CONDUIT OUTLET BODIES. CONDUIT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. PARALLEL AND PERPENDICULAR TO STRUCTURE WALL AND CEILING LINES. ALL CONDUIT SHALL BE FISHED TO CLEAR OBSTRUCTIONS. ENDS OF CONDUITS SHALL BE TEMPORARILY CAPPED FLUSH TO FINISH GRADE TO PREVENT CONCRETE, PLASTER OR DIRT FROM ENTERING. CONDUITS SHALL BE RIGIDLY CLAMPED TO BOXES BY GALVANIZED MALLEABLE IRON BUSHING ON INSIDE AND GALVANIZED MALLEABLE IRON LOCKNUT ON OUTSIDE AND INSIDE.
- EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL. SHALL MEET OR EXCEED UL 50 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND NEMA 3R (OR BETTER) METAL RECEPTACLE, SWITCH AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED OR NON-CORRODING; SHALL MEET OR
- EXCEED UL 514A AND NEMA OS 1 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
- 26. NONMETALLIC RECEPTACLE, SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2 (NEWEST REVISION) AND BE
- RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS. 27. THE CONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CARRIER AND/OR CROWN CASTLE USA INC. BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
- 28. THE CONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD LIFE AND PROPERTY. 29. INSTALL LAMICOID LABEL ON THE METER CENTER TO SHOW "AT&T".
- 30. ALL EMPTY/SPARE CONDUITS THAT ARE INSTALLED ARE TO HAVE A METERED MULE TAPE PULL CORD INSTALLED.

SYSTEM	CONDUCTOR	COLOR
	A PHASE	BLACK
120/240V, 1Ø	B PHASE	RED
120/2400, 10	NEUTRAL	WHITE
	GROUND	GREEN
	A PHASE	BLACK
	B PHASE	RED
120/208V, 3Ø	C PHASE	BLUE
	NEUTRAL	WHITE
	GROUND	GREEN
	A PHASE	BROWN
	B PHASE	ORANGE OR PURPLE
277/480V, 3Ø	C PHASE	YELLOW
	NEUTRAL	GREY
	GROUND	GREEN
DC VOLTAGE	POS (+)	RED**
DC VOLTAGE	NEG (-)	BLACK**

CONDUCTOR COLOR CODE

ABBREVIATIONS:

EXISTING (E) FACILITY INTERFACE FRAME GENERATOR GEN GPS GLOBAL POSITIONING SYSTEM **GSM**

GLOBAL SYSTEM FOR MOBILE LTE LONG TERM EVOLUTION MGB MASTER GROUND BAR MW MICROWAVE (N)

> PROPOSED POWER PLANT

NEC

(P)

NATIONAL ELECTRIC CODE

QUANTITY RECTIFIER

RADIO BASE STATION RET REMOTE ELECTRIC TILT RADIO FREQUENCY DATA SHEET **RFDS** RRH REMOTE RADIO HEAD RRU REMOTE RADIO UNIT

WORK POINT

SIAD SMART INTEGRATED DEVICE TMA TOWER MOUNTED AMPLIFIER TYP TYPICAL UMTS UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM 200 SPECTRUM CENTER DRIVE. SUITE 1700 & 1800 IRVINE, CA 92618

575 MOROSGO DRIVE

ATLANTA, GA 30324



RFDS DATED 12/20/13 v1.00

AT&T SITE NUMBER: **SD0453**

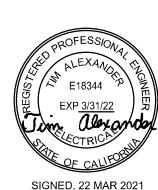
BU #: **815314 MANCHESTER**

2775 CAMINITO OCEAN COVE CARDIFF BY THE SEA, CA 92007

EXISTING 17'-0" MONOPOLE

ISSUED FOR:

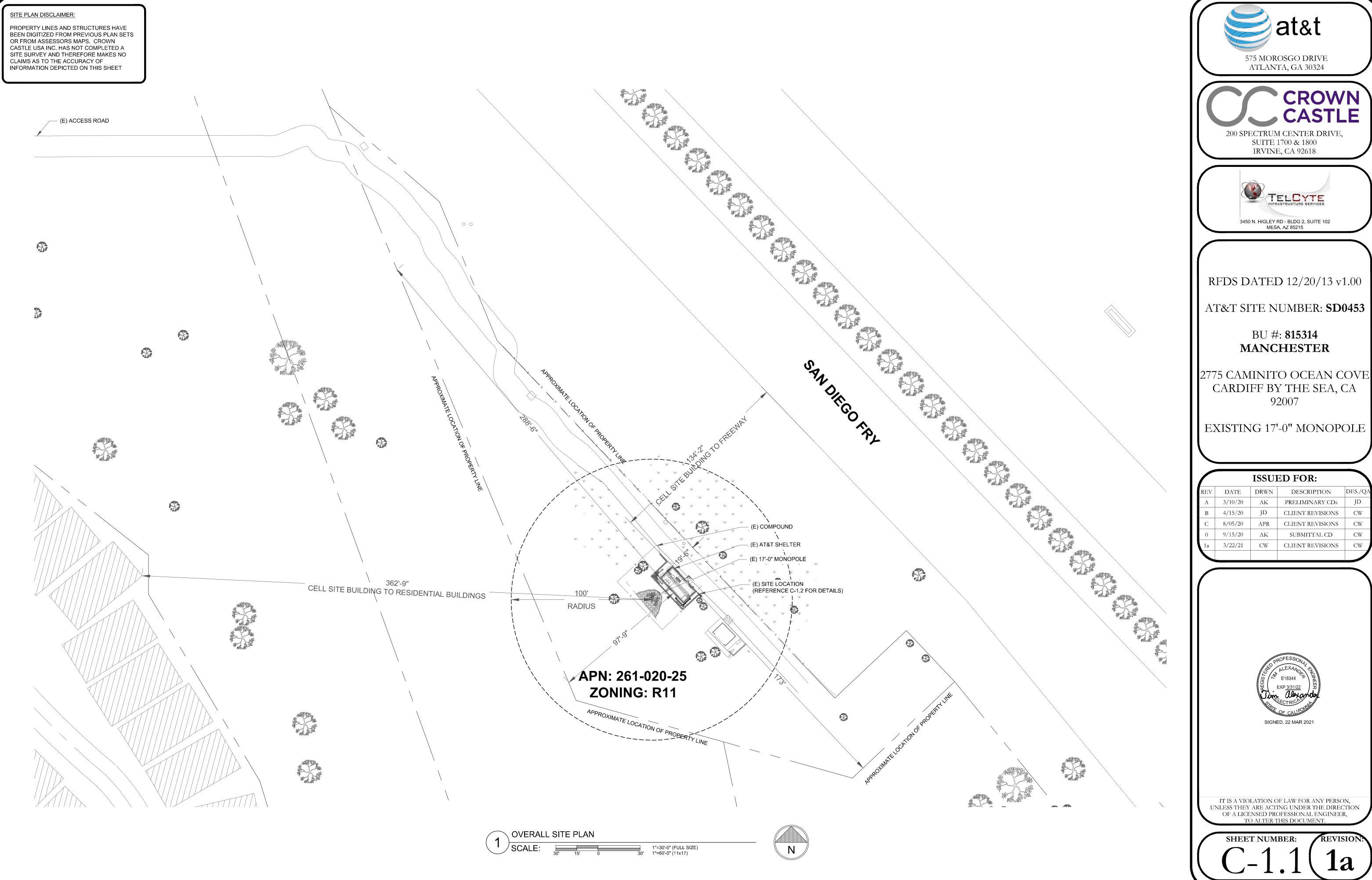
		1000	EDIOK.	
REV	DATE	DRWN	DESCRIPTION	DES./Q
A	3/10/20	AK	PRELIMINARY CDs	JD
В	4/15/20	JD	CLIENT REVISIONS	CW
С	8/05/20	APR	CLIENT REVISIONS	CW
0	9/15/20	AK	SUBMITTAL CD	CW
1a	3/22/21	CW	CLIENT REVISIONS	CW



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER:

REVISION









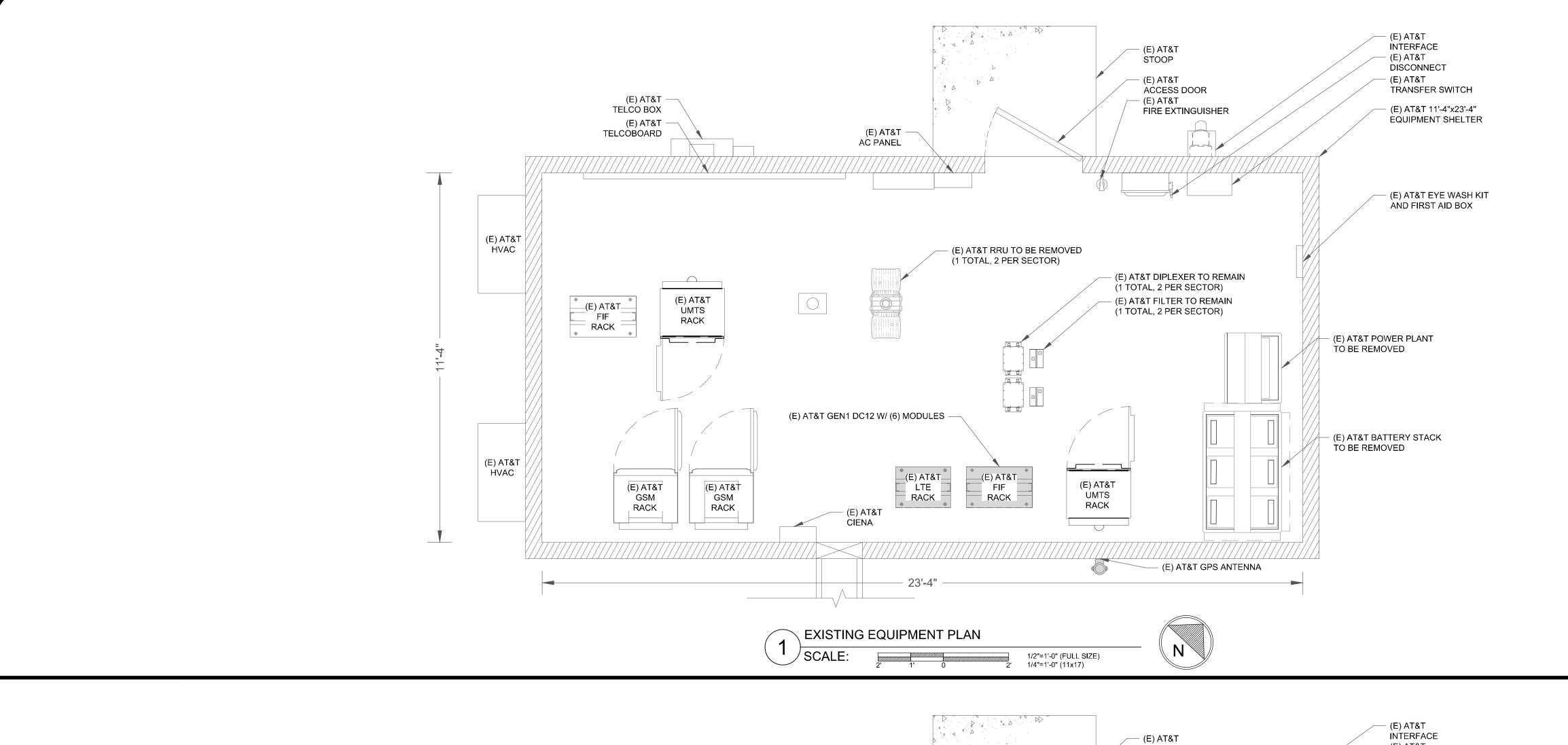
MANCHESTER

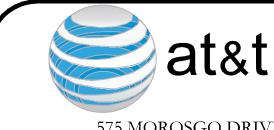
CARDIFF BY THE SEA, CA

		ISSUI	ED FOR:	
REV	DATE	DRWN	DESCRIPTION	DES./Q
A	3/10/20	AK	PRELIMINARY CDs	JD
В	4/15/20	JD	CLIENT REVISIONS	CW
С	8/05/20	APR	CLIENT REVISIONS	CW
0	9/15/20	AK	SUBMITTAL CD	CW
1a	3/22/21	CW	CLIENT REVISIONS	CW



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.





575 MOROSGO DRIVE ATLANTA, GA 30324



SUITE 1700 & 1800 IRVINE, CA 92618



3450 N. HIGLEY RD - BLDG 2, SUITE 102 MESA, AZ 85215

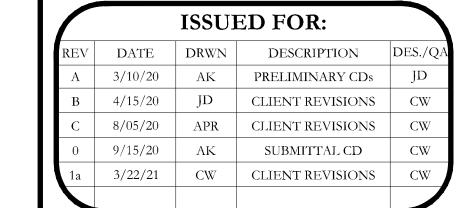
RFDS DATED 12/20/13 v1.00

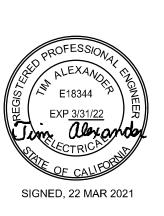
AT&T SITE NUMBER: **SD0453**

BU #: **815314 MANCHESTER**

2775 CAMINITO OCEAN COVE CARDIFF BY THE SEA, CA 92007

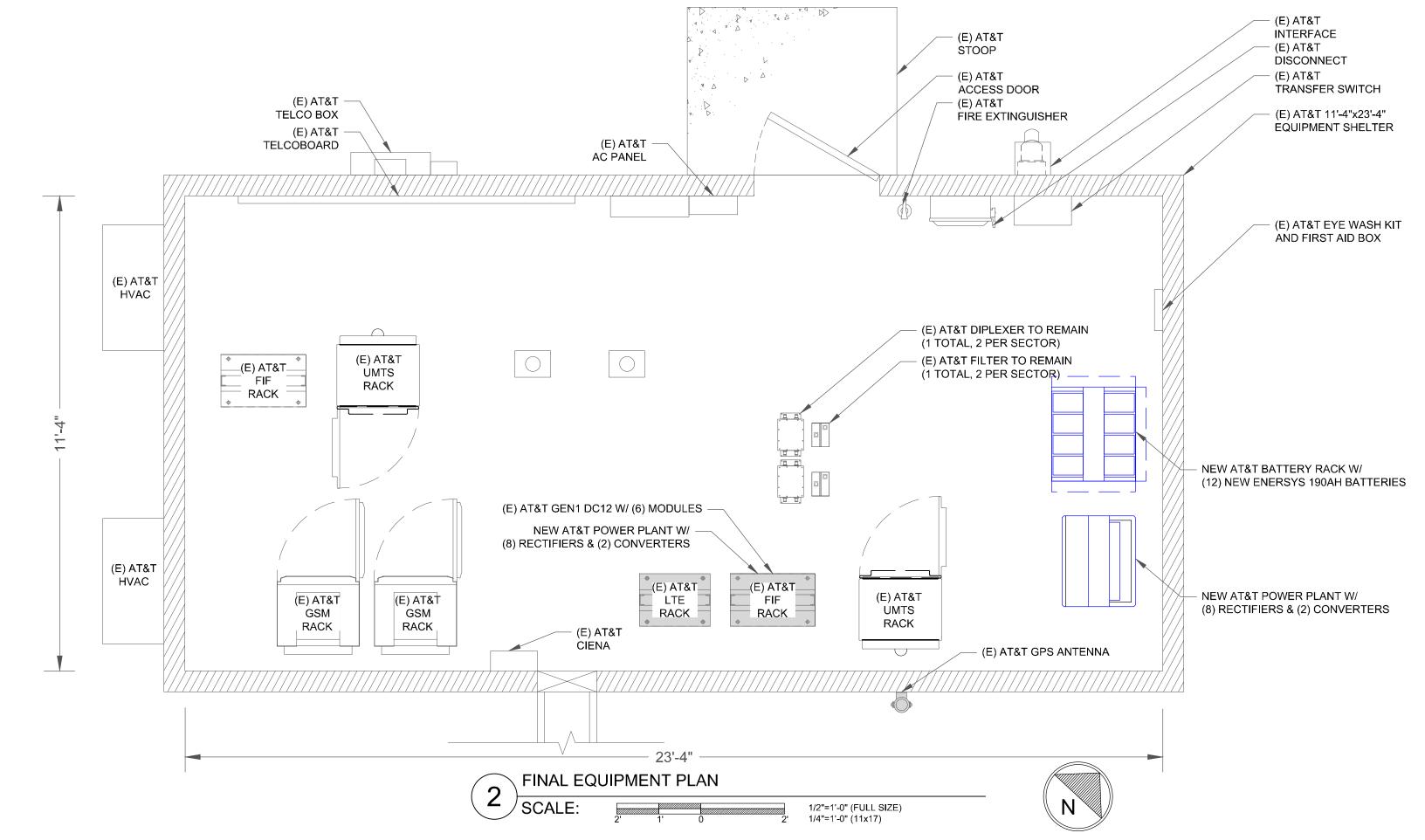
EXISTING 17'-0" MONOPOLE

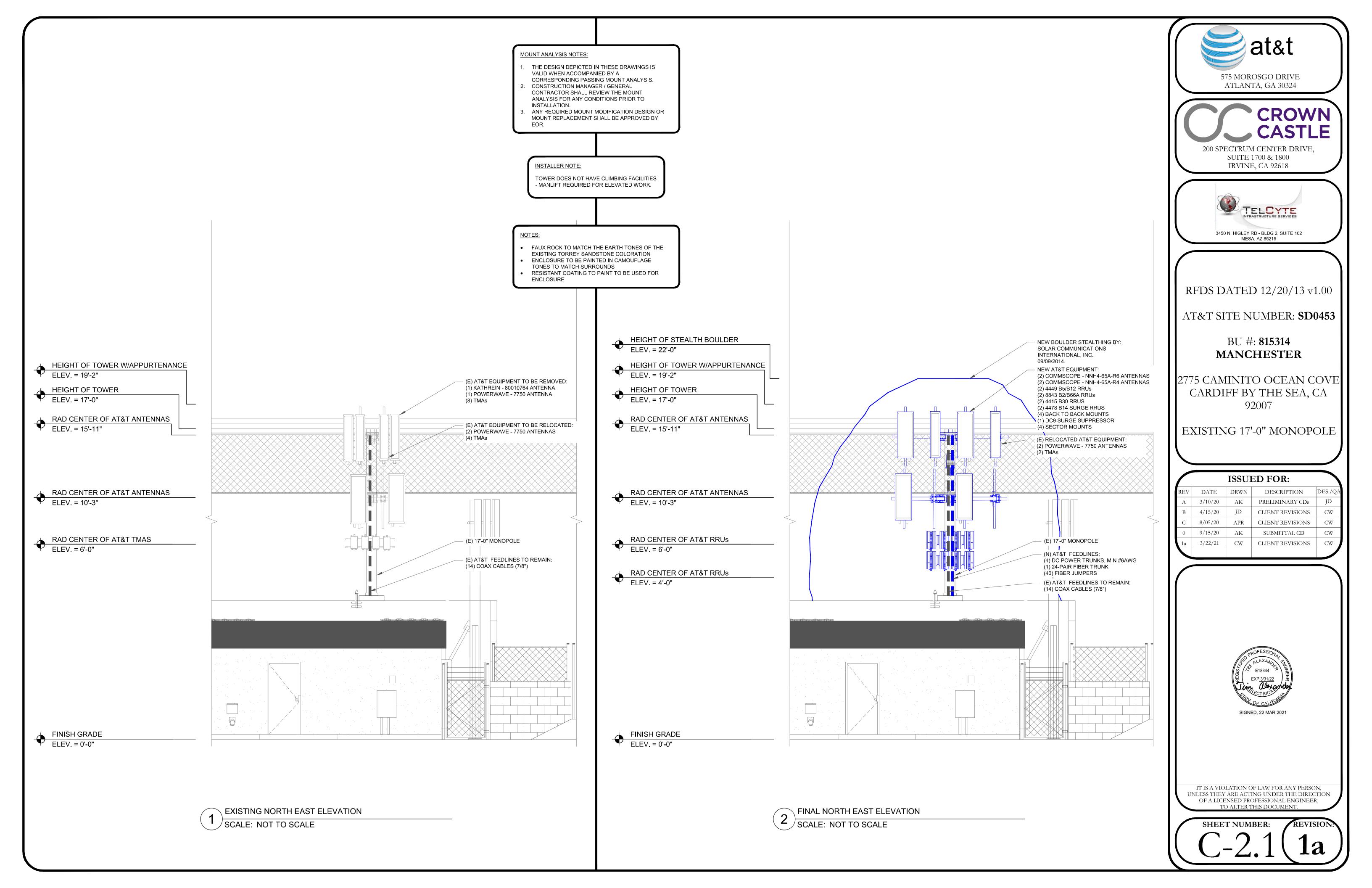


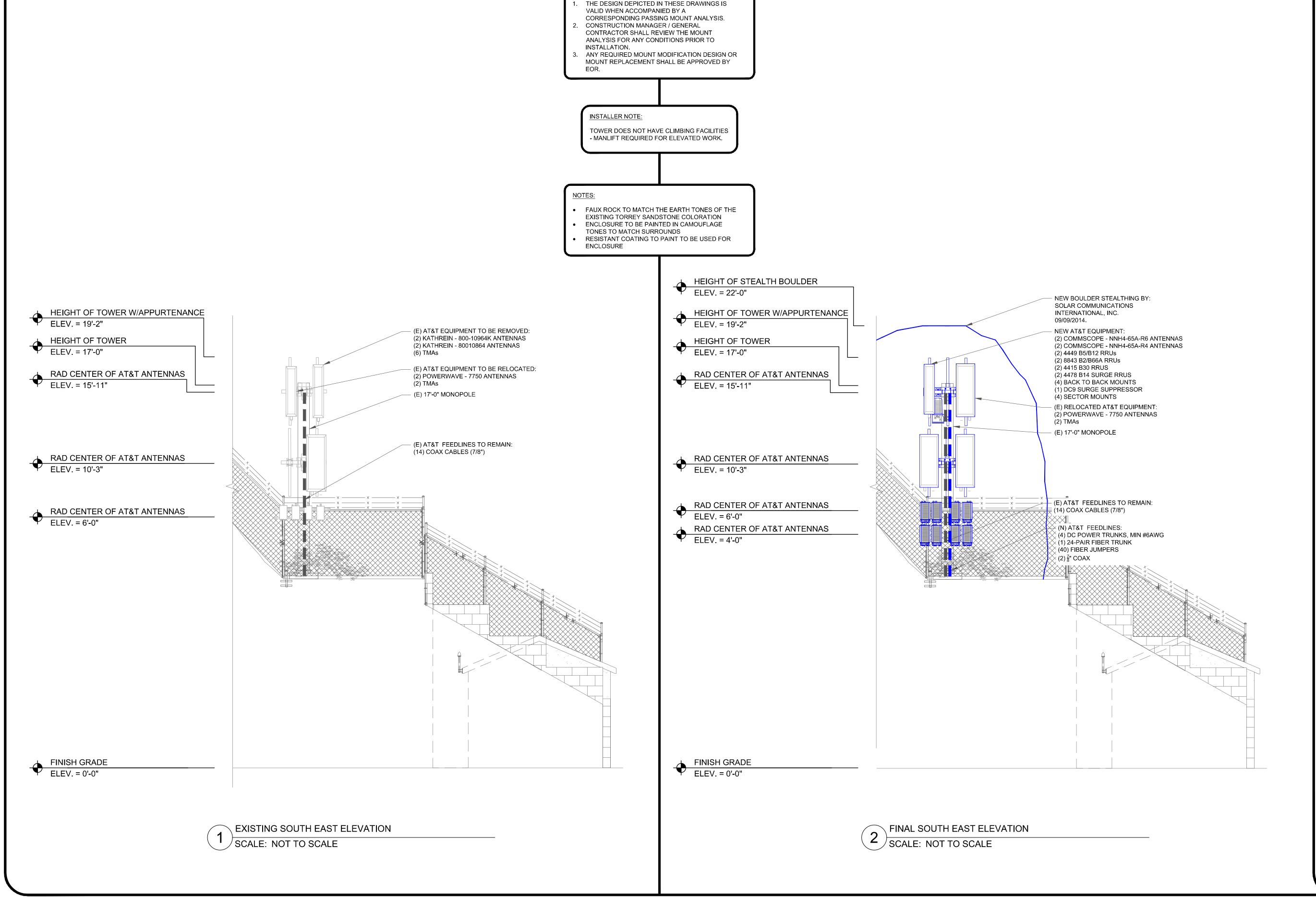


IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER: REVISION TO THE PROPERTY OF THE







MOUNT ANALYSIS NOTES:



575 MOROSGO DRIVE ATLANTA, GA 30324



SUITE 1700 & 1800 IRVINE, CA 92618



RFDS DATED 12/20/13 v1.00

MESA, AZ 85215

AT&T SITE NUMBER: **SD0453**

BU #: **815314 MANCHESTER**

2775 CAMINITO OCEAN COVE CARDIFF BY THE SEA, CA 92007

EXISTING 17'-0" MONOPOLE

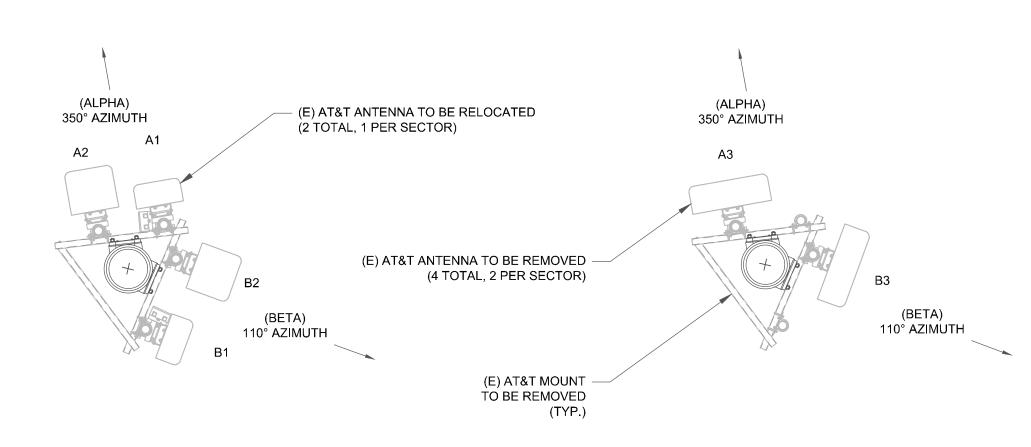
_								
ISSUED FOR:								
REV	DATE	DRWN	DESCRIPTION	DES./Q				
Α	3/10/20	AK	PRELIMINARY CDs	JD				
В	4/15/20	JD	CLIENT REVISIONS	CW				
С	8/05/20	APR	CLIENT REVISIONS	CW				
0	9/15/20	AK	SUBMITTAL CD	CW				
1a	3/22/21	CW	CLIENT REVISIONS	CW				



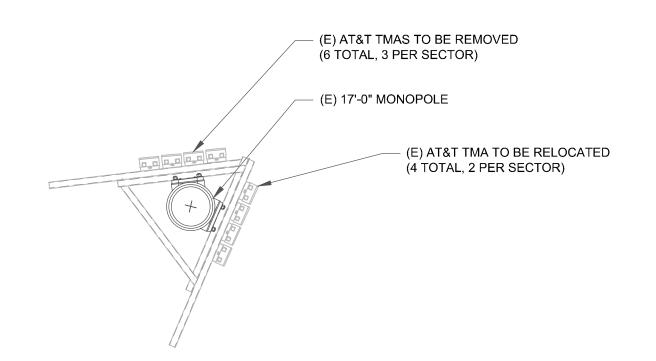
IT IS A VIOLATION OF LAW FOR ANY PERSON,
UNLESS THEY ARE ACTING UNDER THE DIRECTION
OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.

SHEET NUMBER:

ALPHA						EXISTING EC																
7 (2.1)		ANTENNA				RADIO			DIPLEXER			TMA		SURGE PROTECTION	CABLES							
POSITION	TECH.	STATUS/MANUFACTURER MODEL	AZIMUTH	RAD CENTER	QTY.	STATUS/MODEL	LOCATION	QTY.	STATUS	LOCATION	QTY.	STATUS	QTY.	STATUS/MODEL	QTY.	STATUS/TYPE	SIZE	LENGTH				
A1	OTHER	(E) POWERWAVE 7750	350°	15'-11"	-	-	-	-	-	-	2	KRY 112 75/1	-	-	-	-	_	-				
	LTE/	(E) KATHREIN			1	(E) RRUS-11 B12	GROUND									(E) 224Y	7/8"					
A2	700/1900	80010764	350°	15'-11"	1	(E) RRUS-12 B2	GROUND	-	-	=	1	TMA209F00V1	-	<u>-</u>	3	(E) COAX		40'-0"				
А3	LTE	(E) POWERWAVE	350°	15'-11"	•	-	-		_	-	2	KRY 112 75/1	_	·		_	_					
AS	LIE	7750	330	15-11	•	-	-	-	-	-	2	KK1 112 75/1			_	-	-					
A4	-	-	-	-	-	-		-	-	-	-	-	-	<u>-</u>	-	-	-	-				
BETA																						
B1	OTHER	(E) POWERWAVE 7750	350°	15'-11"	Ŷ	-	-	ı	-	ı	2	KRY 112 75/1	-	-	-	-	-	-				
D0	LTE/	(E) KATHREIN	050%	451.448	1	(E) RRUS-11 B12	GROUND				1	TM4000F00V4			3	(E) COAX	7.0	401.07				
B2	700/1900	80010764	350°	15'-11"	1	(E) RRUS-12 B2	GROUND	-	-	-	1	TMA209F00V1	-	-		(E) COAX	7/8"	40'-0"				
В3	LTE	(E) POWERWAVE	350°	15'-11"		-	-		_		2	KRY 112 75/1	_	_	_	_						
Б3		7750	330	13-11	•	-	-		·	- -						MX1 112 73/1		-		_		
В4		-	-	-	-	-	-	-	-	ı	ı	-	-	-	-	-	-	-				
NOTE: (E) - EXIST (N) - NEW	ING						•						-									



@ 15'-11" AGL



@ 6'-0" AGL



@ 10'-3" AGL

SUPPORTS, DIRECT CONTACT OR CLOSE PROXIMITY O THE WIRE ROPE WHICH MAY CAUSE FRICTIONAL

WEAR, IMPACT TO THE ANCHORAGE POINTS IN ANY WAY, OR TO IMPEDE/BLOCK ITS INTENDED USE. ANY COMPROMISED SAFETY CLIMB, INCLUDING EXISTING CONDITIONS MUST BE TAGGED OUT AND REPORTED TO YOUR CROWN CASTLE USA INC. POC OR CALL THE NOC TO GENERATE A SAFETY CLIMB MAINTENANCE AND CONTRACTOR NOTICE TICKET.

REFERENCE C-1.2 FOR FINAL EQUIPMENT SCHEDULE.

CONTRACTOR TO VERIFY ALL ANTENNA TIP HEIGHTS

THE DESIGN DEPICTED IN THESE DRAWINGS IS VALID WHEN ACCOMPANIED BY A CORRESPONDING PASSING MOUNT ANALYSIS.

ANY REQUIRED MOUNT MODIFICATION DESIGN OR MOUNT REPLACEMENT SHALL BE APPROVED BY

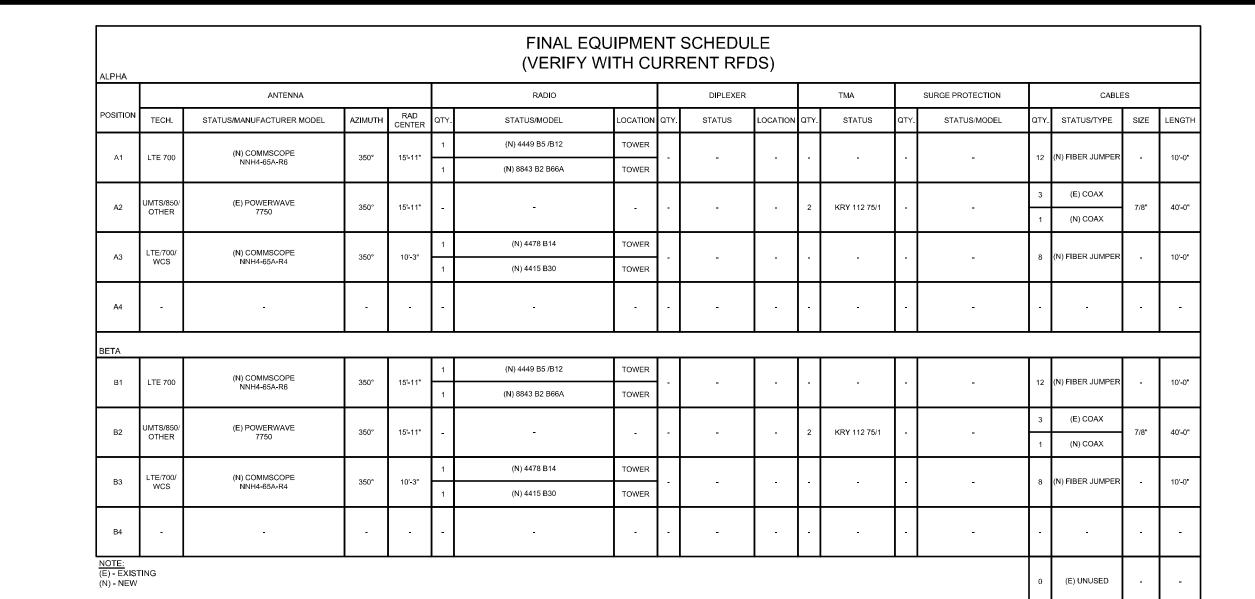
CONSTRUCTION MANAGER / GENERAL CONTRACTOR SHALL REVIEW THE MOUNT ANALYSIS FOR ANY CONDITIONS PRIOR TO

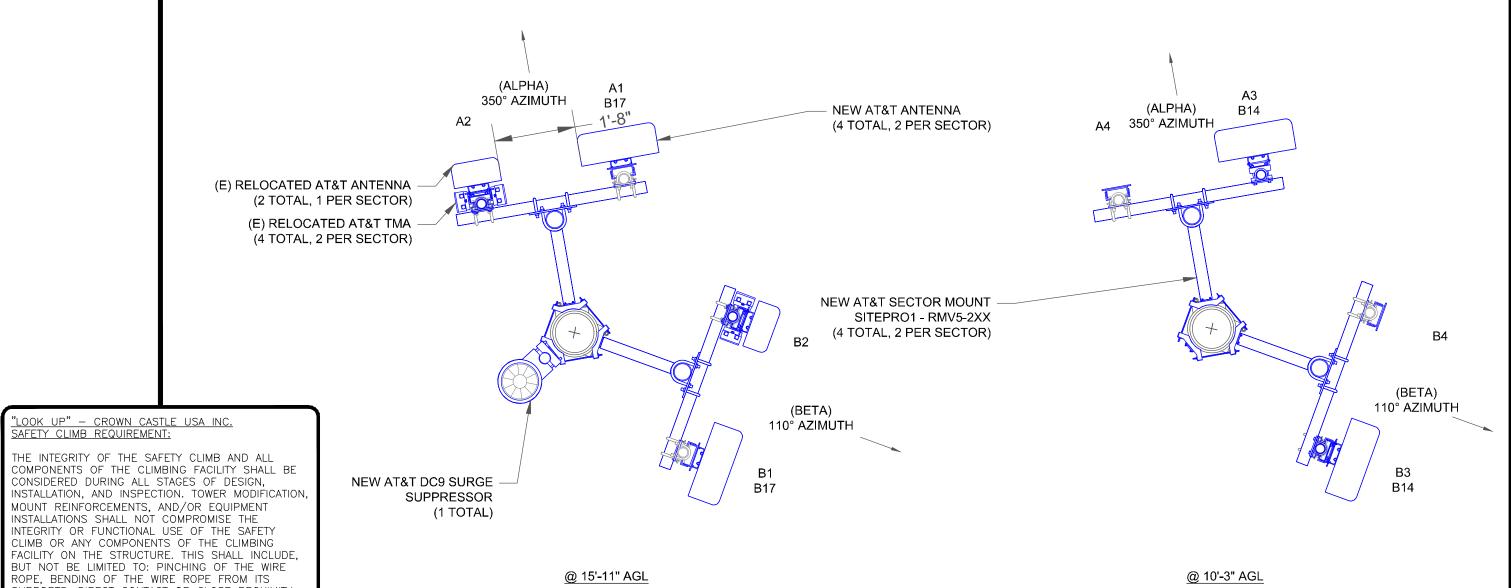
2. REFERENCE C-4 & C-5 FOR NEW EQUIPMENT

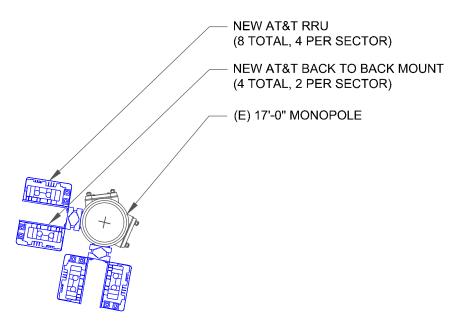
DO NOT EXCEED BEACON BASE HEIGHT. 4. TOWER DOES NOT HAVE CLIMBING FACILITIES -MANLIFT REQUIRED FOR ELEVATED WORK.

MOUNT ANALYSIS NOTES:

INSTALLATION.







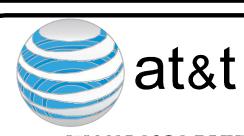
@ 4'-0" AGL @ 7'-0" AGL

NEW ANTENNA PLAN SCALE: NOT TO SCALE

@ 15'-11" AGL



@ 10'-3" AGL



575 MOROSGO DRIVE ATLANTA, GA 30324



IRVINE, CA 92618



RFDS DATED 12/20/13 v1.00

AT&T SITE NUMBER: **SD0453**

BU #: **815314 MANCHESTER**

2775 CAMINITO OCEAN COVE CARDIFF BY THE SEA, CA 92007

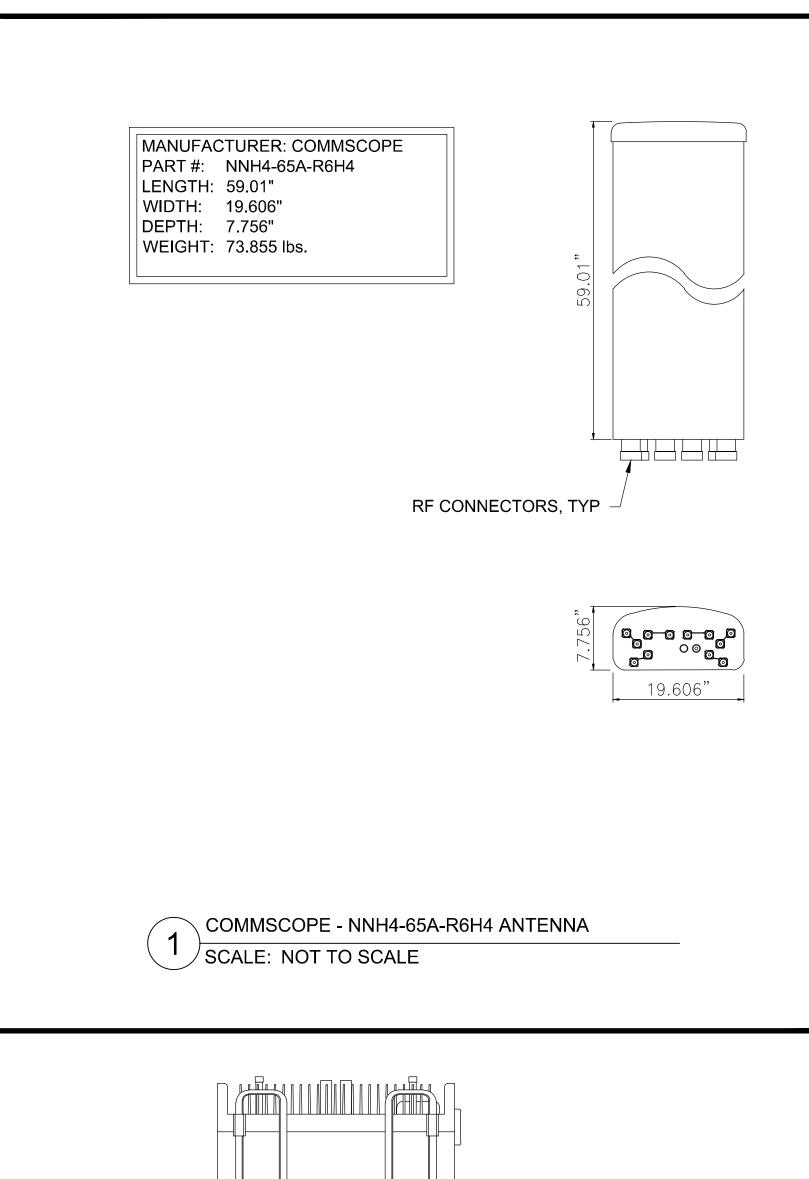
EXISTING 17'-0" MONOPOLE

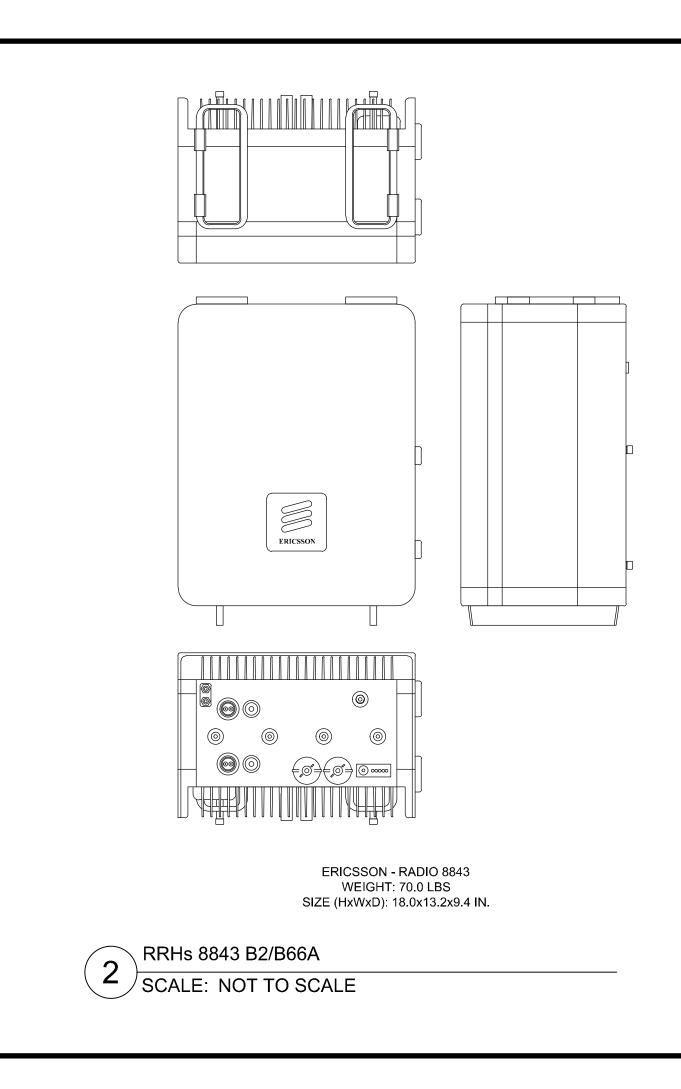
ISSUED FOR:								
REV	DATE	DRWN	DESCRIPTION	DES./QA				
A	3/10/20	AK	PRELIMINARY CDs	JD				
В	4/15/20	JD	CLIENT REVISIONS	CW				
С	8/05/20	APR	CLIENT REVISIONS	CW				
0	9/15/20	AK	SUBMITTAL CD	CW				
1a	3/22/21	CW	CLIENT REVISIONS	CW				

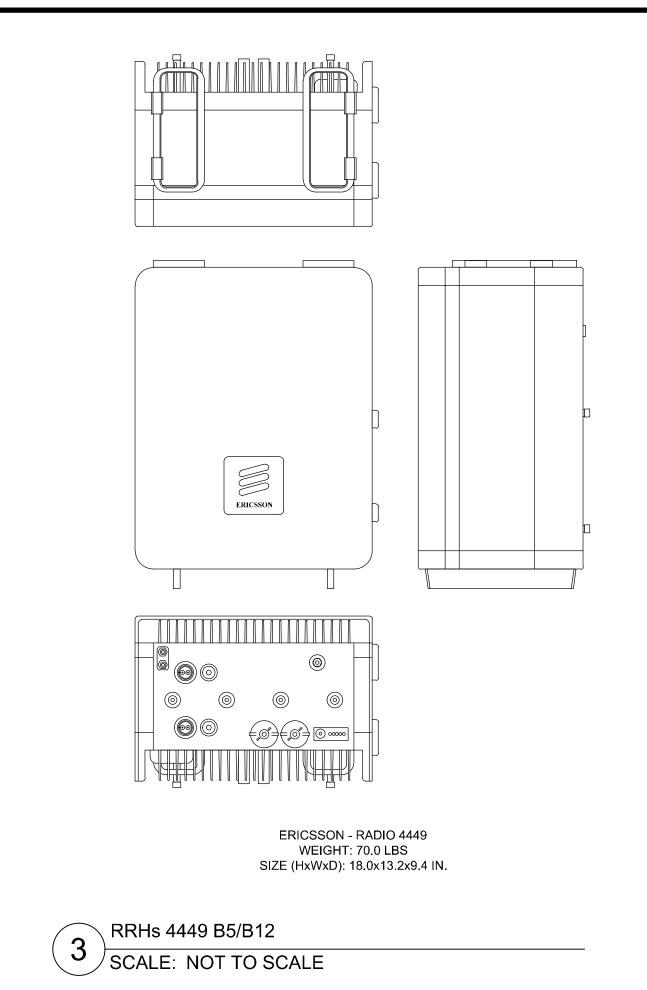


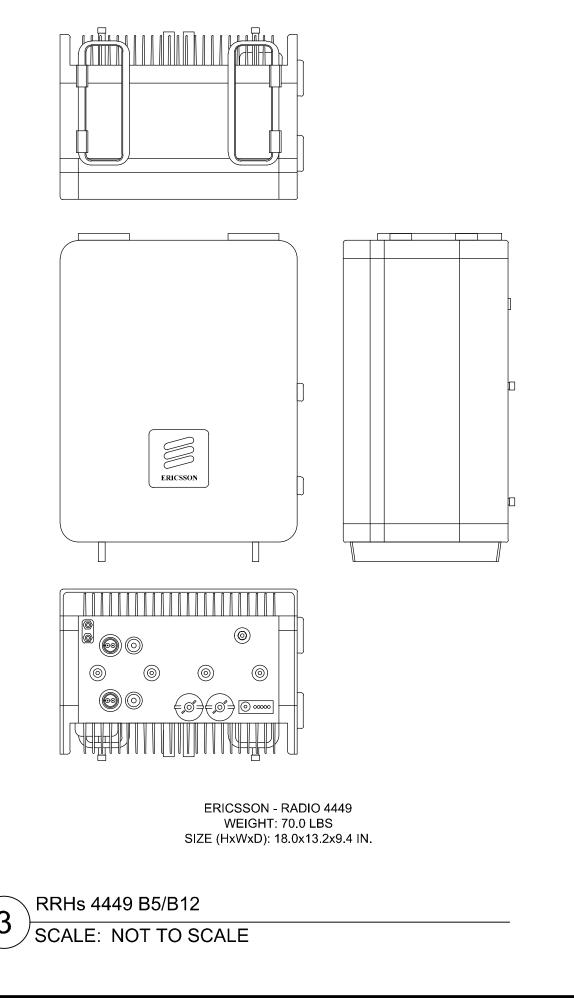
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

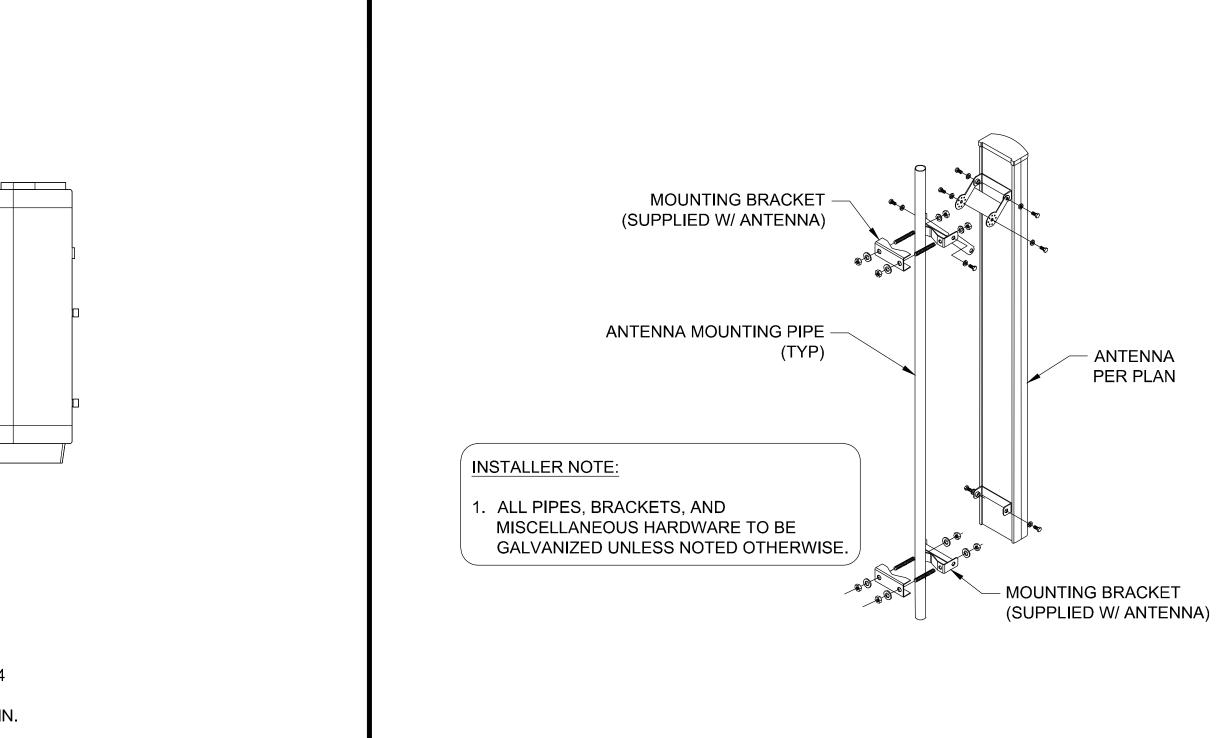






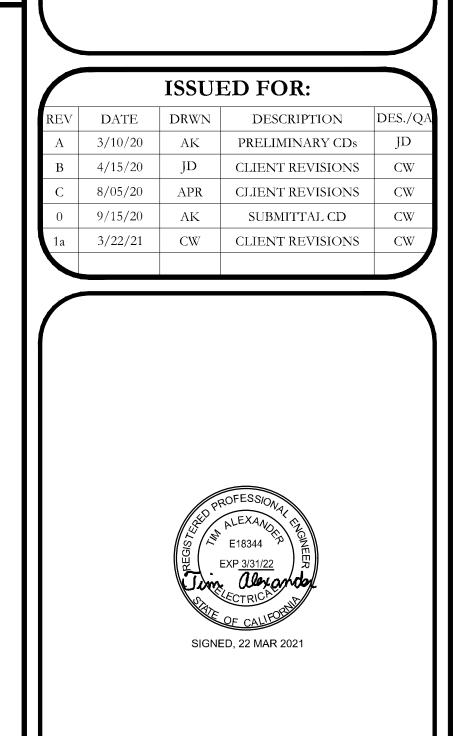






ANTENNA MOUNTING DETAIL

6) SCALE: NOT TO SCALE



at&t

CROWN

575 MOROSGO DRIVE

ATLANTA, GA 30324

200 SPECTRUM CENTER DRIVE, SUITE 1700 & 1800 IRVINE, CA 92618

TELCYTE INFRASTRUCTURE SERVICES

3450 N. HIGLEY RD - BLDG 2, SUITE 102 MESA, AZ 85215

RFDS DATED 12/20/13 v1.00

AT&T SITE NUMBER: **SD0453**

BU #: **815314**

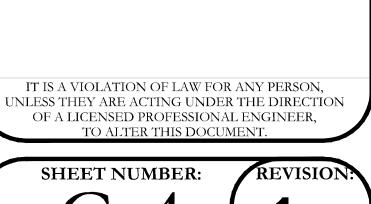
MANCHESTER

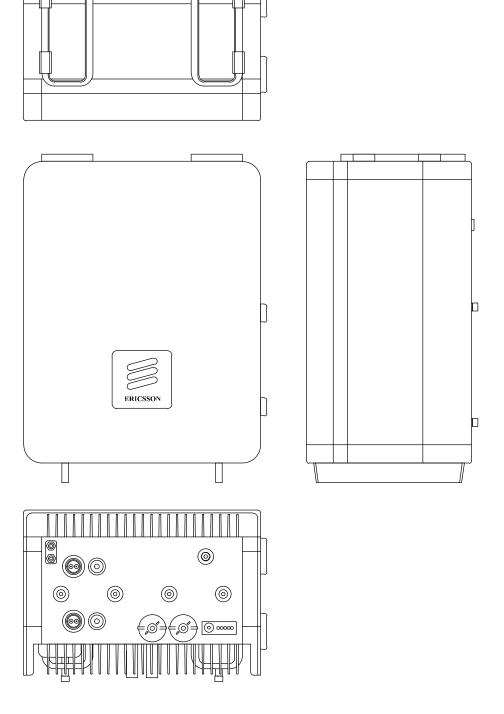
2775 CAMINITO OCEAN COVE

CARDIFF BY THE SEA, CA

92007

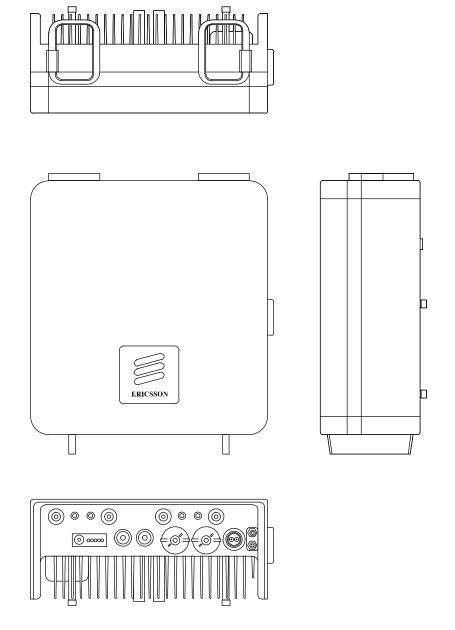
EXISTING 17'-0" MONOPOLE





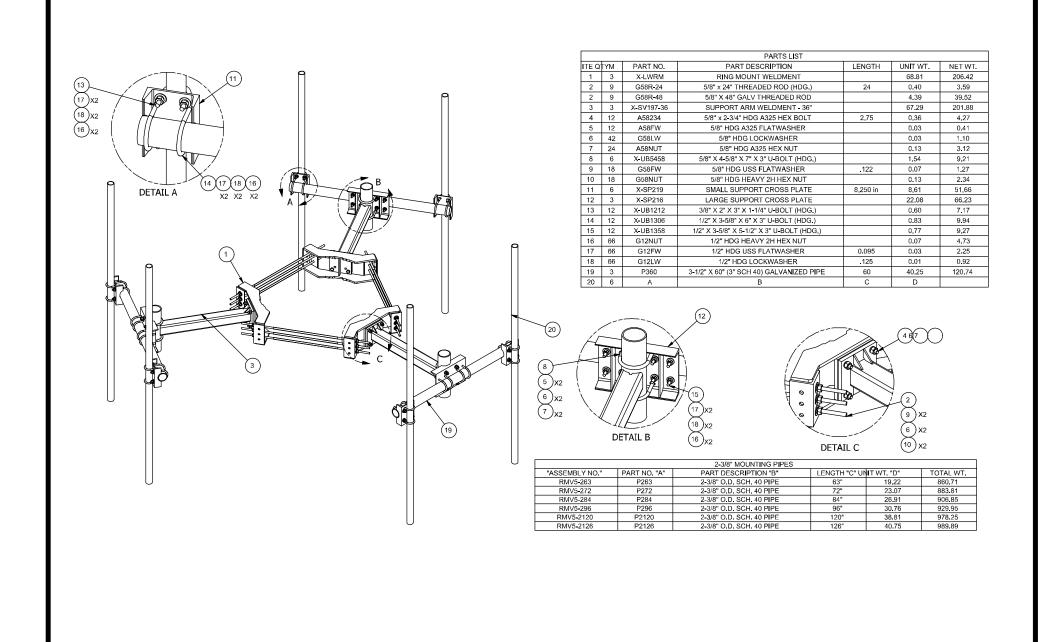
ERICSSON - RADIO 4415 B30 WEIGHT: 70.0 LBS SIZE (HxWxD): 18.0x13.2x9.4 IN.

SCALE: NOT TO SCALE



ERICSSON - RRUS 4478 B14 WEIGHT: 60.0 LBS SIZE (HxWxD): 15.0x13.0x8.0 IN.

5 SCALE: NOT TO SCALE



T-ARM DETAIL

(2) SCALE: NOT TO SCALE

48BA1200

84"x25.5"x24.4"

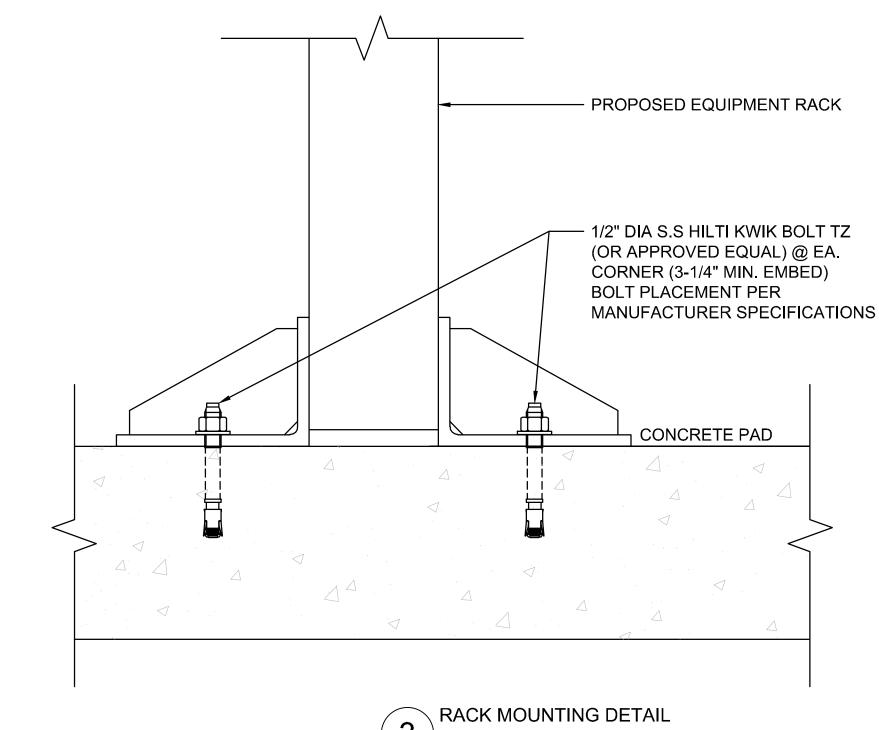
(3) 24V STRINGS

NEQ.12090 MARATHON

M12v180FT TYP. OF 12

1200 AMPS PER BAY

100A BREAKER PER STRING



EXISTING 17'-0" MONOPOLE

REV DATE DRWN DESCRIPTION

APR

CW

4/15/20 JD

9/15/20

3/22/21

at&t

CROWN CASTLE

575 MOROSGO DRIVE ATLANTA, GA 30324

200 SPECTRUM CENTER DRIVE, SUITE 1700 & 1800 IRVINE, CA 92618

TELCYTE

3450 N. HIGLEY RD - BLDG 2, SUITE 102 MESA, AZ 85215

RFDS DATED 12/20/13 v1.00

AT&T SITE NUMBER: **SD0453**

BU #: **815314**

MANCHESTER

2775 CAMINITO OCEAN COVE

CARDIFF BY THE SEA, CA

92007

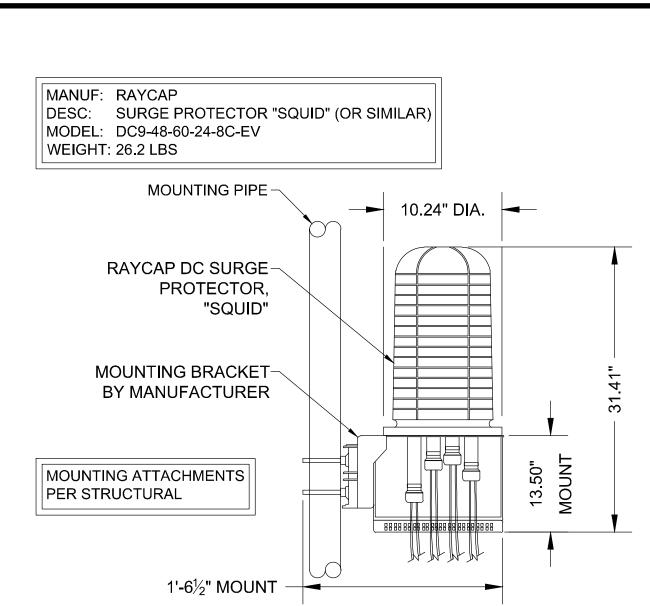
ISSUED FOR:

3/10/20 AK PRELIMINARY CDs

CLIENT REVISIONS CW

CLIENT REVISIONS

SUBMITTAL CD CLIENT REVISIONS

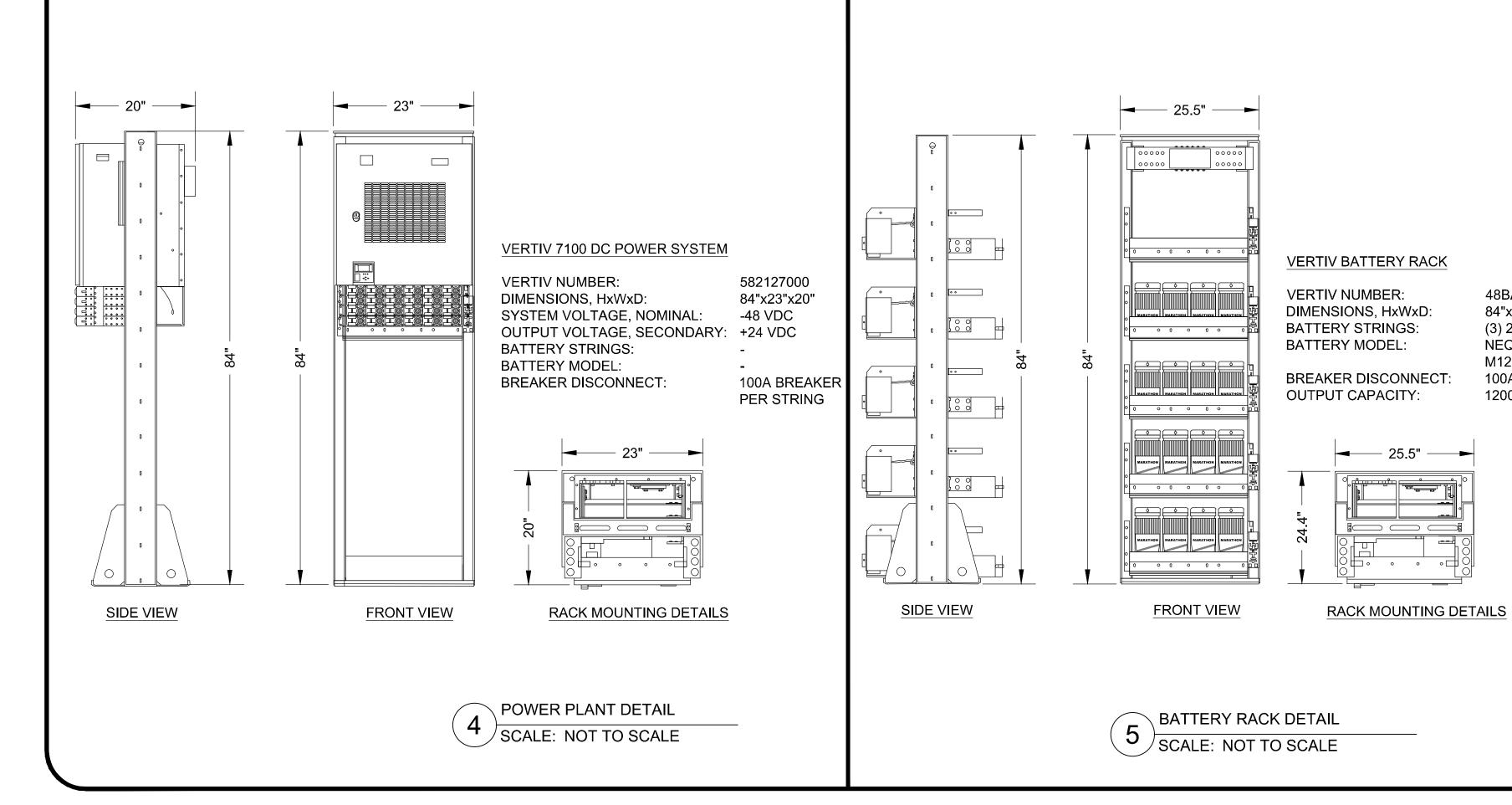


SCALE: NOT TO SCALE



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER:



(INSTALLED)

(INSTALLED)

BASE LEVEL

SCALE: NOT TO SCALE

(4) 7/8" TO 13 FT LEVEL

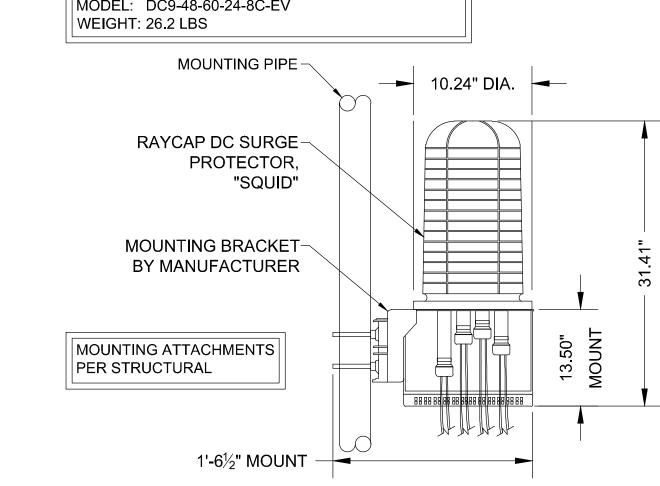
_ (4) 7/8" TO 6 FT LEVEL

(AT&T MOBILITY)

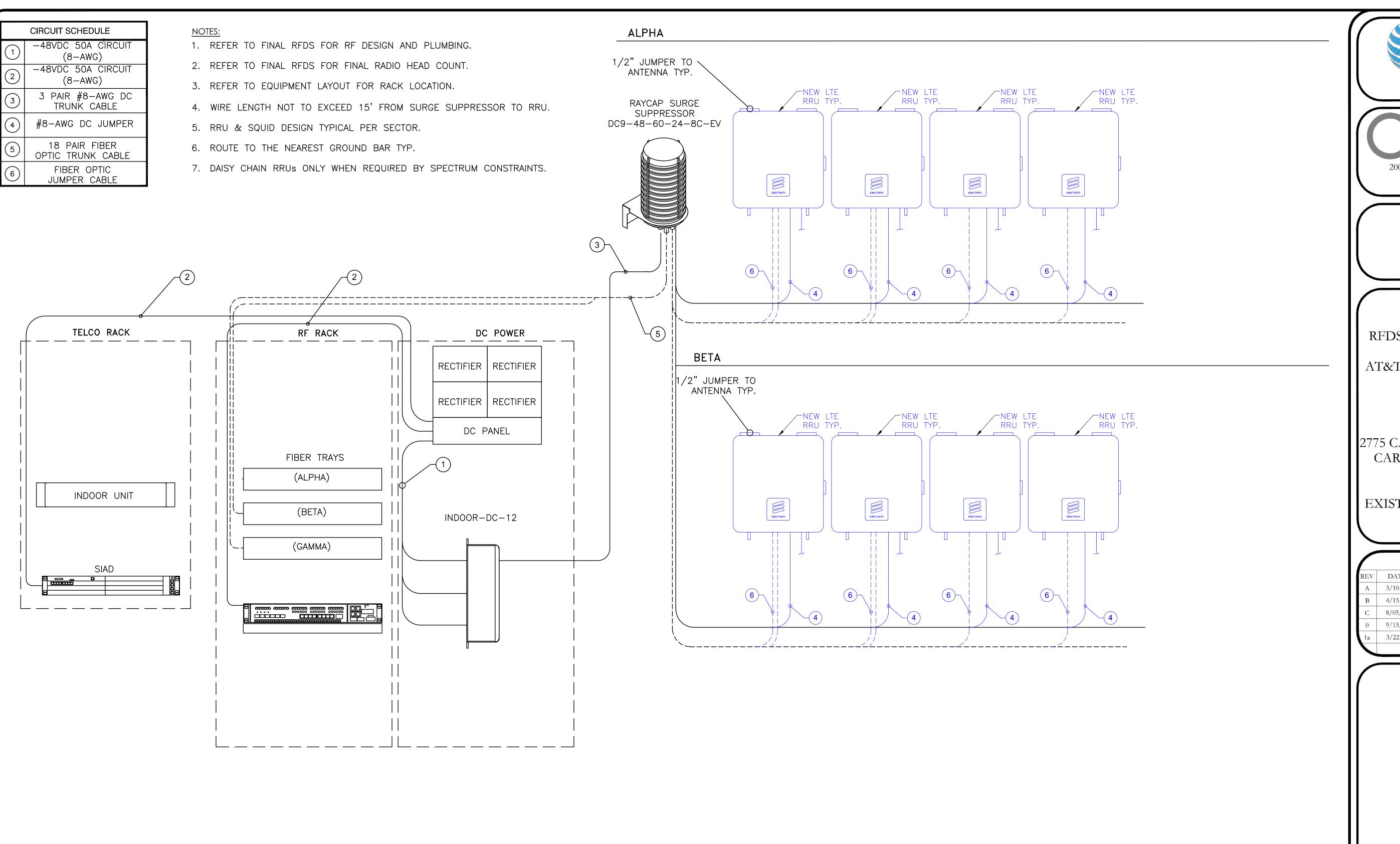
(AT&T MOBILITY)

(INSTALLED)

(4) 7/8" TO 6 FT LEVEL (AT&T MOBILITY) —



SURGE SUPPRESSOR DETAIL DC9-48-60-24-8C-EV SCALE: NOT TO SCALE





575 MOROSGO DRIVE ATLANTA, GA 30324



IRVINE, CA 92618



RFDS DATED 12/20/13 v1.00

AT&T SITE NUMBER: **SD0453**

BU #: **815314 MANCHESTER**

2775 CAMINITO OCEAN COVE CARDIFF BY THE SEA, CA 92007

EXISTING 17'-0" MONOPOLE

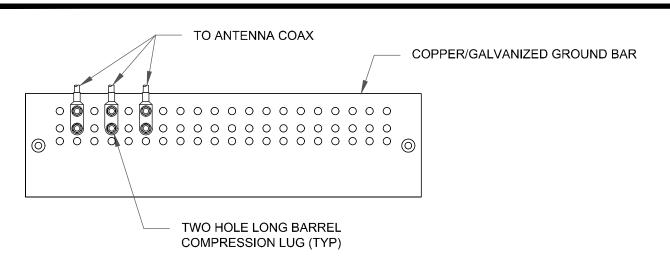
	ISSUED FOR:						
REV	DATE	DRWN	DESCRIPTION	DES./QA			
A	3/10/20	AK	PRELIMINARY CDs	JD			
В	4/15/20	JD	CLIENT REVISIONS	CW			
С	8/05/20	APR	CLIENT REVISIONS	CW			
0	9/15/20	AK	SUBMITTAL CD	CW			
1a	3/22/21	CW	CLIENT REVISIONS	CW			



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

IEET NUMBER:

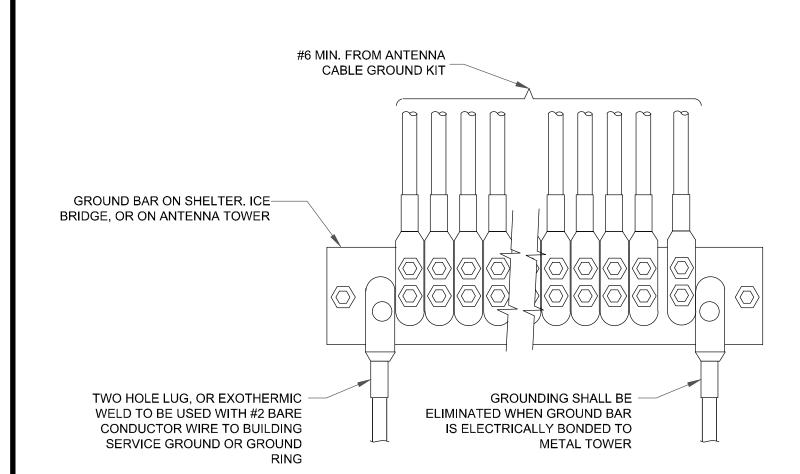
(1a



NOTES:

- 1. DOUBLING UP "OR STACKING" OF CONNECTIONS IS NOT PERMITTED.
- 2. EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS. 3. GROUND BAR SHALL NOT BE ISOLATED FROM TOWER, MOUNT DIRECTLY TO TOWER STEEL.

ANTENNA GROUND BAR DETAIL $^\prime$ SCALE: NOT TO SCALE



GROUNDWIRE INSTALLATION

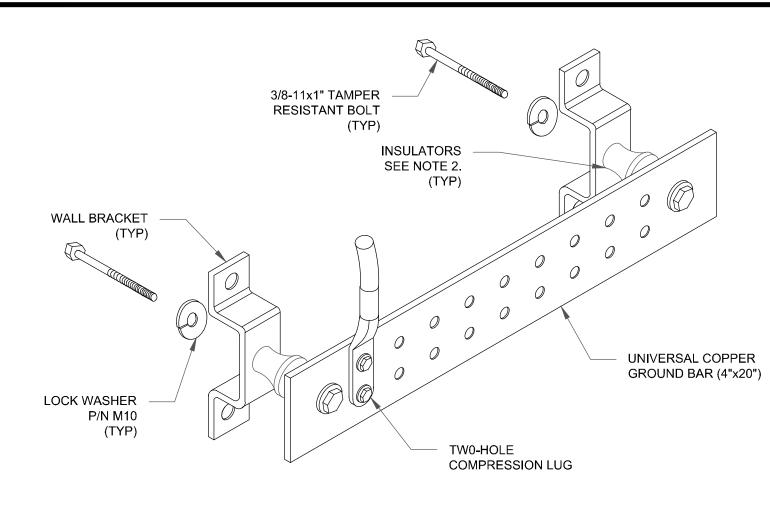
 $^\prime$ SCALE: NOT TO SCALE

TO ANTENNA COAX COPPER/GALVANIZED GROUND BAR #2 SOLID TINNED COPPER CONDUCTOR TO TOWER/SHELTER GROUND RING (2 TYP. FOR BOTTOM TWO HOLE LONG BARREL COMPRESSION LUG GROUND BAR ONLY)

NOTES:

- 1. EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS. 2. GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO TOWER STEEL (TOWER ONLY).
- 3. GROUND BAR SHALL BE ISOLATED FROM BUILDING OR SHELTER.

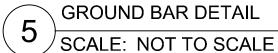
TOWER/SHELTER GROUND BAR DETAIL SCALE: NOT TO SCALE



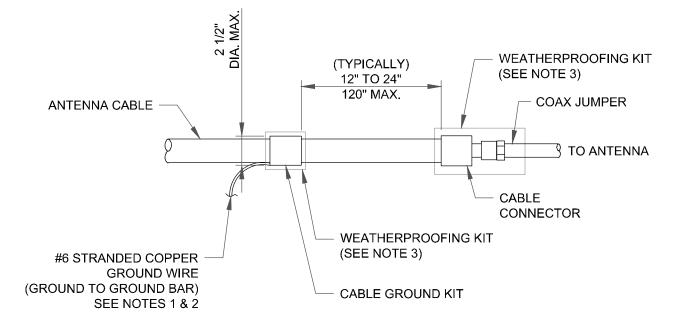
NOTES:

1. DOWN LEAD (HOME RUN) CONDUCTORS ARE <u>NOT</u> TO BE INSTALLED ON CROWN CASTLE USA INC. TOWER, PER THE GROUNDING DOWN CONDUCTOR POLICY QAS-STD-10091, NO MODIFICATION OR DRILLING TO TOWER STEEL IS ALLOWED IN ANY FORM OR FASHION, CAD-WELDING ON THE TOWER AND/OR IN THE AIR ARE NOT PERMITTED.

2. OMIT INSULATOR WHEN MOUNTING TO TOWER STEEL OR PLATFORM STEEL USE INSULATORS WHEN ATTACHING TO BUILDING OR SHELTERS.

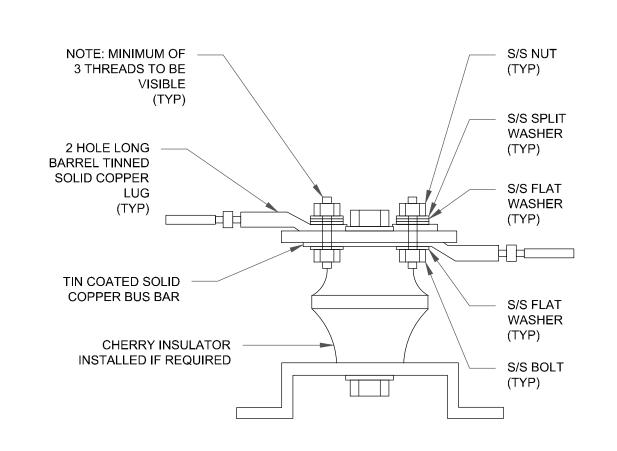


GROUND BAR DETAIL



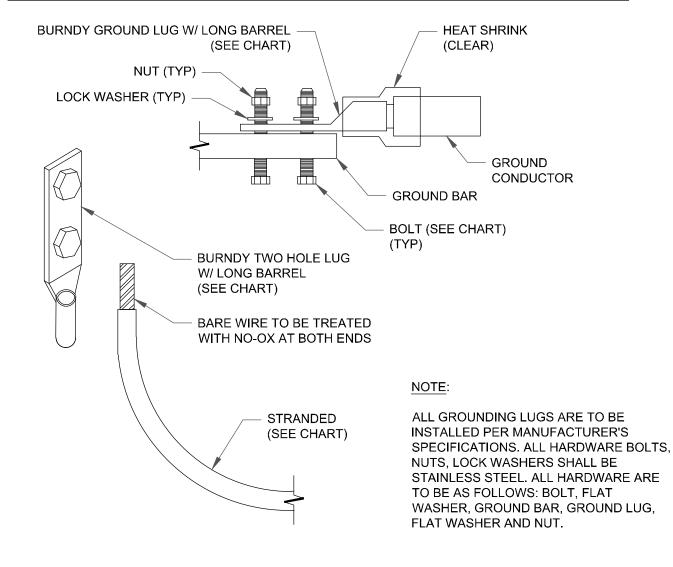
- 1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN
- TO GROUND BAR. 2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY
- CABLE MANUFACTURER. 3. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT, COLD SHRINK SHALL NOT BE USED.



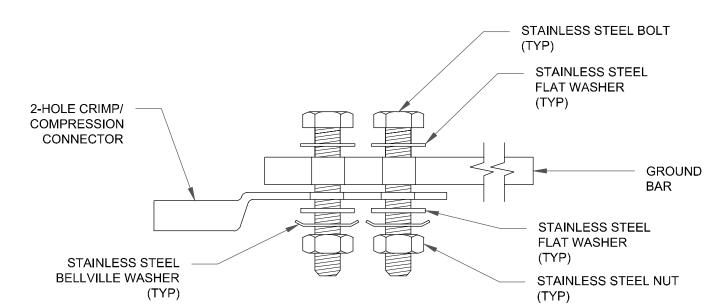


\ LUG DETAIL SCALE: NOT TO SCALE

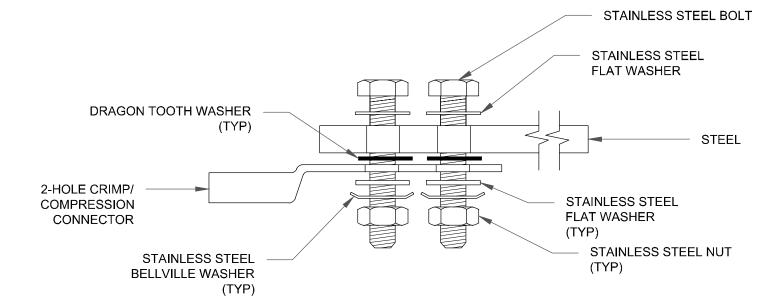
WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC SS 2 BOLT
#2 SOLID TINNED	YA3C-2TC38	3/8" - 16 NC SS 2 BOLT
#2 STRANDED	YA2C-2TC38	3/8" - 16 NC SS 2 BOLT
#2/0 STRANDED	YA26-2TC38	3/8" - 16 NC SS 2 BOLT
#4/0 STRANDED	YA28-2N	1/2" - 16 NC SS 2 BOLT



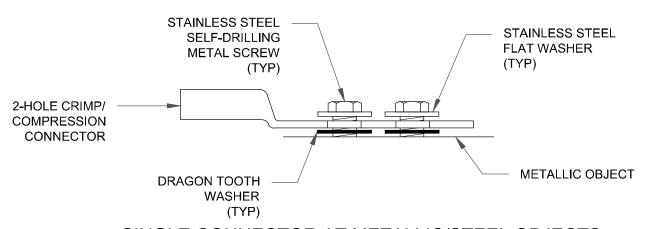
MECHANICAL LUG CONNECTION SCALE: NOT TO SCALE



SINGLE CONNECTOR AT GROUND BARS



SINGLE CONNECTOR AT STEEL OBJECTS



SINGLE CONNECTOR AT METALLIC/STEEL OBJECTS

HARDWARE DETAIL FOR EXTERIOR CONNECTIONS SCALE: NOT TO SCALE





IRVINE, CA 92618



RFDS DATED 12/20/13 v1.00

AT&T SITE NUMBER: **SD0453**

BU #: **815314 MANCHESTER**

2775 CAMINITO OCEAN COVE CARDIFF BY THE SEA, CA 92007

EXISTING 17'-0" MONOPOLE

ISSUED FOR: DATE DRWN DESCRIPTION 3/10/20 AK PRELIMINARY CDs 4/15/20 JD CLIENT REVISIONS CWCLIENT REVISIONS APR CW9/15/20 SUBMITTAL CD 3/22/21 CW CLIENT REVISIONS



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER:



MANCHESTER 22' TALL RFTRANSPARENT BOULDER

LOCATION:

2775 CAMINITO OCEAN COVE CARDIFF, CA 92007 SAN DIEGO COUNTY SITE: SITE #: SD0453

DRAWING INDEX

1 TITLE SHEET

N1 NOTES & SPECIFICATIONS

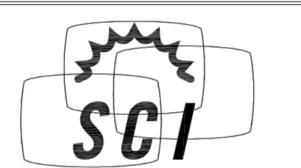
S1-S3 DETAILS

S4 FOUNDATION

S5 DETAILS



SHEET



© 2020 SOLAR COMMUNICATIONS INTERNATIONAL, INC.

41745 Anza Road Temecula, CA 92592 Phone: (951) 698-5985 www.RFTransparent.com

© 2020 SOLAR COMMUNICATIONS INTERNATIONAL, INC. ALL RIGHTS RESERVED. THESE PLANS AND ALL DRAWINGS, DESIGNS, CALCULATIONS AND SPECIFICATIONS ARE COPYRIGHTED MATERIALS OF SOLAR COMMUNICATIONS INTERNATIONAL, INC. ("SCI") PROTECTED BY UNITED STATES COPYRIGHT LAW AND MAY NOT BE COPIED, REPRODUCED, DISTRIBUTED, TRANSMITTED, DISPLAYED, OR PUBLISHED WITHOUT THE PRIOR WRITTEN CONSENT OF SCI. UNAUTHORIZED USE IS STRICTLY PROHIBITED. YOU MAY NOT ALTER OR REMOVE ANY TRADEMARK, COPYRIGHT OR SIMILAR NOTICE FROM THESE MATERIALS.

DATE: 3/30/12		DESIGNED: CNW DRAFTER: DKF						
	REVISIONS							
REV	DATE	DESCRIPTION						
1	12/12/2013	ADD VENTS						
2	4/23/2014	ADD VENTS, REVISE ANCHOR TABS						
3	9/9/2014	UPDATE FOUNDATION DESIGN						
4	8/31/2020	ADD COULMNS w/ KICKERS						

AT&T

JLDER

CIEUIER : #: SD0453 NSPARENT BOULDE

SITE #: SD0453
ALL RFTRANSPAREN

SITE 22' TALL RFTRAN



U1085.450.203

T1

REV

DESIGN CRITERIA

STRUCTURAL DESIGN IS BASED ON THE CALIFORNIA BUILDING CODE, 2019 EDITION (2018 IBC) AND THE ASCE 7-16 STANDARD

DESIGN LOADS:

WIND: WIND SPEED = 96 MPH (3-SEC GUST) PER THE ASCE 7-16 STANDARD RISK CATEGORY: II EXPOSURE: C **ELEVATION: 77 FT ABOVE SEA LEVEL**

ICE: NONE PER THE ASCE 7-16 STANDARD

SEISMIC:

IMPORTANCE FACTOR: 1.00 RISK CATEGORY: MAPPED SPECTRAL RESPONSE ACCELERATIONS: Ss = 1.180g, $S_1 = 0.420g$ SITE CLASS: D SPECTRAL RESPONSE COEFFICIENTS: SDS = 0.944g, SD1 = 0.526gSEISMIC DESIGN CATEGORY: D ANALYSIS PROCEDURE: SEISMIC DEMANDS ON NONSTRUCTURAL COMPONENTS

STRUCTURAL STEEL

- ALL STEEL RECTANGULAR TUBES (HSS) SHALL CONFORM w/ ASTM A500 GR. B (46 KSI), U.N.O.
- ALL OTHER STEEL SHAPES & PLATES SHALL CONFORM w/ ASTM A36, U.N.O.
- ALL BOLTS FOR STEEL-TO-STEEL CONNECTIONS SHALL CONFORM w/ ASTM F3125 GR A325, U.N.O.
- 4. ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS IN ACCORDANCE w/ THE LATEST VERSION OF THE AMERICAN WELDING SOCIETY AWS D1.1. STEEL WELDS SHALL BE BY E70XX LOW HYDROGEN ELECTRODES, U.N.O.
- 5. ALL STEEL SURFACES SHALL BE GALVANIZED IN ACCORDANCE w/ ASTM A123 AND ASTM F2329 STANDARDS.
- 6. ALL STRUCTURAL BOLTS SHALL BE TIGHTENED PER AN APPROVED PRETENSIONING METHOD AS DEFINED BY AISC. FOR EASE OF INSPECTION, THE "TURN-OF-NUT" METHOD AS DEFINED BY AISC WITH MATCH-MARKING TECHNIQUES IS RECOMMENDED.
- 7. ALL BOLT HOLES SHALL BE STANDARD (1/16" OVERSIZED), U.N.O. WASHERS ARE REQUIRED FOR ANY CONNECTION THAT HAS LARGER THAN STANDARD SIZED BOLT HOLES.
- 8. ALL HEAVY HEX NUTS SHALL BE ASTM A563 GR. C OR DH OR EQUIVALENT.
- ALL HARDENED WASHERS SHALL BE ASTM F436 OR EQUIVALENT.

FRP

- FRP STRUCTURAL SHAPES SHALL BE STRONGWELL EXTREN SERIES 500/525 MANUFACTURED USING THE PULTRUSION PROCESS. REFER TO LARR 25698 FOR FIREPROOF RATING.
- 2. ALL FIELD CUT OR DRILLED EDGES OF FRP STRUCTURAL MEMBERS TO BE COATED BY OTHERS WITH RESIN OR ACRYLIC SEALER COMPATIBLE WITH THE RESIN MATRIX USED IN THE STRUCTURAL SHAPE.
- 3. IF PREFABRICATED MEMBERS DO NOT ASSEMBLE PER PLAN, CONTACT SOLAR COMMUNICATIONS INTERNATIONAL, INC. BEFORE CUTTING OR ALTERING FABRICATED MEMBERS.
- 4. FRP STRUCTURAL MEMBERS SHALL BE FABRICATED AND ASSEMBLED AS INDICATED ON THE DRAWINGS.
- THE CONTRACTOR SHALL PROTECT THE FRP STRUCTURAL MEMBERS FROM ABUSE TO PREVENT BREAKAGE, NICKS, GOUGES, ETC. DURING FABRICATION, HANDLING, AND INSTALLATION.
- FRP BOLTS SHOULD BE TIGHTENED AND LOCKED WITH EPOXY.
- 7. FRP BOLTS SHALL BE SPACED AT FOUR TIMES THE BOLT DIAMETER BETWEEN BOLT CENTERS U.N.O. FRP BOLTS SHALL NOT BE PLACED CLOSER THAN THE FOLLOWING DISTANCES MEASURED FROM THE BOLT CENTER TO THE NEAREST EDGE:
- TWO TIMES THE DIAMETER MEASURED PERPENDICULAR TO THE DIRECTION OF PULTRUSION (GRAIN).
- THREE TIMES THE DIAMETER MEASURED PARALLEL TO THE DIRECTION OF PULTRUSION (GRAIN).

GENERAL NOTES

- CONTRACTOR SHALL FIELD VERIFY SITE OR LAYOUT RESTRICTIONS, SITE CONDITIONS, DIMENSIONS, AND ELEVATIONS BEFORE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF SCI, INC. PRIOR TO BEGINNING PROJECT. ALL WORK SHALL BE PERFORMED USING ACCEPTED CONSTRUCTION PRACTICES. CONTRACTOR TO VERIFY MATERIALS PROVIDED BY SCI PRIOR TO INSTALLATION.
- ALL ENGINEERING PLANS, DRAWINGS, DESIGNS, CALCULATIONS AND SPECIFICATIONS (COLLECTIVELY, "PLANS") ARE DESIGNED TO THE PROPRIETARY MANUFACTURING SPECIFICATIONS OF SOLAR COMMUNICATIONS INTERNATIONAL, INC. ("SCI") INTENDED AND AUTHORIZED SOLELY FOR USE WITH PRODUCT PRODUCED BY SCI. UNAUTHORIZED USE IS STRICTLY PROHIBITED. CUSTOMER AGREES TO DEFEND, INDEMNIFY AND HOLD SCI HARMLESS FROM AND AGAINST ANY AND ALL DEMANDS, CLAIMS, SUITS, PROCEEDINGS, LOSSES, LIABILITIES. DAMAGES, FEES, COSTS AND EXPENSES (INCLUDING, WITHOUT LIMITATION, REASONABLE ATTORNEYS' FEES AND COSTS) ARISING FROM OR RELATING TO ANY UNAUTHORIZED USE OF SCI'S PLANS BY CUSTOMER.
- NO FIELD MODIFICATIONS MAY BE MADE TO RFTRANSPARENT PANELS WITHOUT THE EXPRESS WRITTEN CONSENT FROM THE ENGINEER OF RECORD. SCI, INC. AND ENGINEER OF RECORD ASSUME NO RESPONSIBILITY FOR THE STRUCTURE IF ALTERATIONS AND/OR ADDITIONS ARE MADE TO THE DESIGN AS SHOWN IN THESE DRAWINGS.
- THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL COMPLY WITH ALL LOCAL CODES, REGULATIONS, AND ORDINANCES AS WELL AS STATE DEPARTMENT OF INDUSTRIAL REGULATIONS AND DIVISION OF INDUSTRIAL SAFETY (OSHA) REQUIREMENTS.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT ALL WORK TO THE BEST OF HIS/HER ABILITY AND SKILL. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES, AND SEQUENCES, AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT
- THE CONTRACTOR SHALL VERIFY, COORDINATE, AND PROVIDE ALL NECESSARY BLOCKING, BACKING, FRAMING, HANGERS, OR OTHER SUPPORTS FOR ALL ITEMS REQUIRING SAME. WHETHER SHOWN OR NOT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING, SHORING, FORMWORK, ETC., AND SHALL CONFORM TO ALL NATIONAL, STATE, AND LOCAL ORDINANCES AND CODES, IN ORDER TO SAFELY EXECUTE ALL STAGES OF WORK TO COMPLETE THIS PROJECT
- IT IS THE INTENT OF THESE DRAWINGS TO SHOW THE COMPLETED INSTALLATION OF THE STRUCTURE SHOWN.
- CONTRACTOR ASSUMES RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES. THIS REQUIREMENT APPLIES CONTINUOUSLY, AND IS NOT LIMITED TO NORMAL WORKING HOURS.
- CONTRACTOR TO HOLD ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT.
- 10. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN. THE CONTRACTOR IS FINANCIALLY RESPONSIBLE FOR REPAIR OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGED IN CONJUNCTION WITH THE EXECUTION OF WORK ON THIS PROJECT.
- 11. WEATHER PROOFING AND/OR FLASHING TO BE PROVIDED BY CONTRACTOR AS REQUIRED.
- 12. ALL FRP MEMBERS TO BE FIELD-CUT BY OTHERS.

DESIGN REACTIONS:

V1 = 25 lb (1.0D + 0.6W)

V2 = 1,050 lb (1.0D + 0.6W)

EQUIPMENT)

R1 (DOWN) = 4,900 lb (1.0D + 0.6W)R1 (UP) = 2,400 lb (0.6D + 0.6W)

R2 (DOWN) = 3,200 lb (0.6D + 0.6W)R2 (UP) = 3,575 lb (1.0D + 0.6W)

 ALL FRP MEMBERS AND PANELS TO BE SUPPLIED BY SCI. ALL STEEL MEMBERS TO BE SUPPLIED BY CONTRACTOR.

APPROXIMATE WEIGHT OF STRUCTURE: 5,400 lb (EXCLUDES WEIGHT OF ANTENNAS &

KICKERS. THE V1 AND V2 REACTIONS ARE ASSUMED TO ACT IN ANY DIRECTION.

THE DESIGN REACTIONS LISTED ABOVE ARE TYPICAL AT THE BASE OF ALL COLUMNS AND

SPECIAL INSPECTIONS

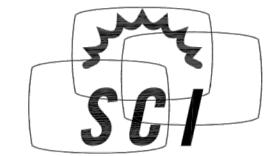
- STEEL FABRICATION SHALL BE DONE ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED AS REQUIRED BY THE BUILDING OFFICIAL TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION. ALTERNATIVELY, SPECIAL INSPECTION OF MATERIALS, WELDING, AND FABRICATION PROCEDURES SHALL BE REQUIRED FOR FABRICATION BY AN UNAPPROVED FABRICATOR.
- NO FIELD WELDING SHALL BE PERMITTED
- THE FOLLOWING SPECIAL INSPECTIONS SHALL BE REQUIRED PER CHAPTER 17 OF THE BUILDING CODE:
- SPECIAL INSPECTION OF HIGH-STRENGTH BOLTING (WHEN APPLICABLE):
- PERIODIC SPECIAL INSPECTION IF BOLTS ARE PRETENSIONED WITH MATCH-MARKING **TECHNIQUES**
- CONTINUOUS SPECIAL INSPECTION OF ALL OTHER HIGH-STRENGTH BOLTING
- SECIAL INSPECTION OF POST-INSTALLED ANCHORAGE TO CONCRETE PER PRODUCT ICC REPORT
- 4. SPECIAL INSPECTION IS NOT REQUIRED FOR WORK OF A MINOR NATURE OR AS WARRANTED BY CONDITIONS IN THE JURISDICTION AS APPROVED BY THE BUILDING OFFICIAL. THUS, SPECIAL INSPECTION ITEMS ABOVE MAY BE WAIVED AS DEEMED APPROPRIATE BY THE BUILDING OFFICIAL

STRUCTURAL OBSERVATION

NO STRUCTURAL OBSERVATION IS REQUIRED

DISCLAIMERS

- ALL STRUCTURAL COMPONENTS TO BE CONNECTED TOGETHER SHALL BE COMPLETELY FIT UP ON THE GROUND OR OTHERWISE VERIFIED FOR COMPATIBILITY PRIOR TO LIFTING ANY COMPONENT INTO PLACE. REPAIRS REQUIRED DUE TO FIT-UP OR CONNECTION COMPATIBILITY PROBLEMS AFTER PARTIAL ERECTION ARE THE FINANCIAL RESPONSIBILITY OF THE CONTRACTOR.
- SOME TELECOMMUNICATION STRUCTURES ARE SUSCEPTIBLE TO WIND-INDUCED OSCILLATIONS. OSCILLATIONS MAY OCCUR AT LOW OR MODERATE WIND SPEEDS AND MAY CAUSE STRUCTURAL DAMAGE. TIA PROVIDES NO PRACTICAL ANALYTICAL METHOD TO PREDICT AND PREVENT WIND-INDUCED STRUCTURAL OSCILLATIONS. VECTOR STRUCTURAL ENGINEERING RECOMMENDS FREQUENT MONITORING TO IDENTIFY WIND-INDUCED OSCILLATION AND REGULAR CONDITION ASSESSMENTS TO IDENTIFY FATIGUE CRACKING, LOOSE OR MISSING BOLTS, AND ANY OTHER STRUCTURAL DEFECTS. ANY OSCILLATION OR DEFECTS OBSERVED SHALL BE IMMEDIATELY REPORTED TO VECTOR STRUCTURAL ENGINEERING FOR FURTHER EVALUATION AND POSSIBLE REPAIRS OR MODIFICATIONS WHICH MAY BE REQUIRED AT THE OWNER'S EXPENSE.



© 2020 SOLAR COMMUNICATIONS INTERNATIONAL, INC.

41745 Anza Road Temecula, CA 92592 Phone: (951) 698-5985 www.RFTransparent.com

RESERVED. THESE PLANS AND ALL DRAWINGS, DESIGNS, CALCULATIONS AND SPECIFICATIONS ARE COPYRIGHTED MATERIALS OF SOLAR
COMMUNICATIONS INTERNATIONAL, INC. ("SCI") PROTECTED BY UNITED DISTRIBUTED, TRANSMITTED, DISPLAYED, OR PUBLISHED WITHOUT TH PRIOR WRITTEN CONSENT OF SCI. UNAUTHORIZED USE IS STRICTLY
PROHIBITED. YOU MAY NOT ALTER OR REMOVE ANY TRADEMARK, COPYRIGHT OR SIMILAR NOTICE FROM THESE MATERIALS.

DATE: 3/30/12			DESIGNED: CNM	DRAFTER: DKF				
	REVISIONS							
REV	DATE		DESCRIPTION					
1	12/12/2013	ADD VENTS						
2	4/23/2014	ADD VENTS, REVISE ANCHOR TABS						
3	9/9/2014	U	IPDATE FOUNDATI	ON DESIGN				
4	8/31/2020	ADD COULMNS w/ KICKERS						

AT&T

ATIONS

CIFIC/

Ш

S

ഗ

NOTE

SPARENT SD0 S SITE # RFTRANS 75 CAMINI CARDIF SAN DIE

BOULDER

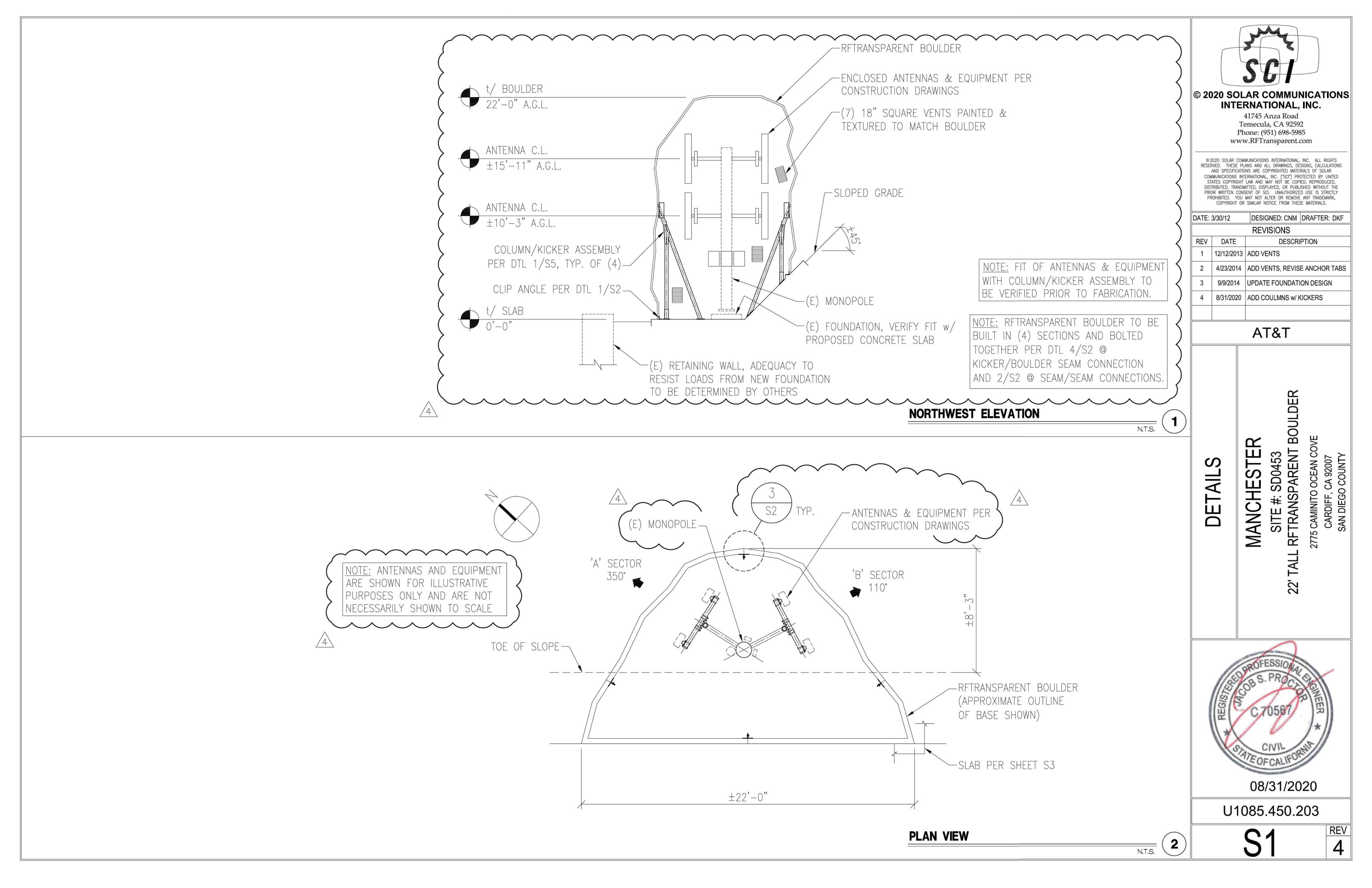
CA 92007 COUNTY

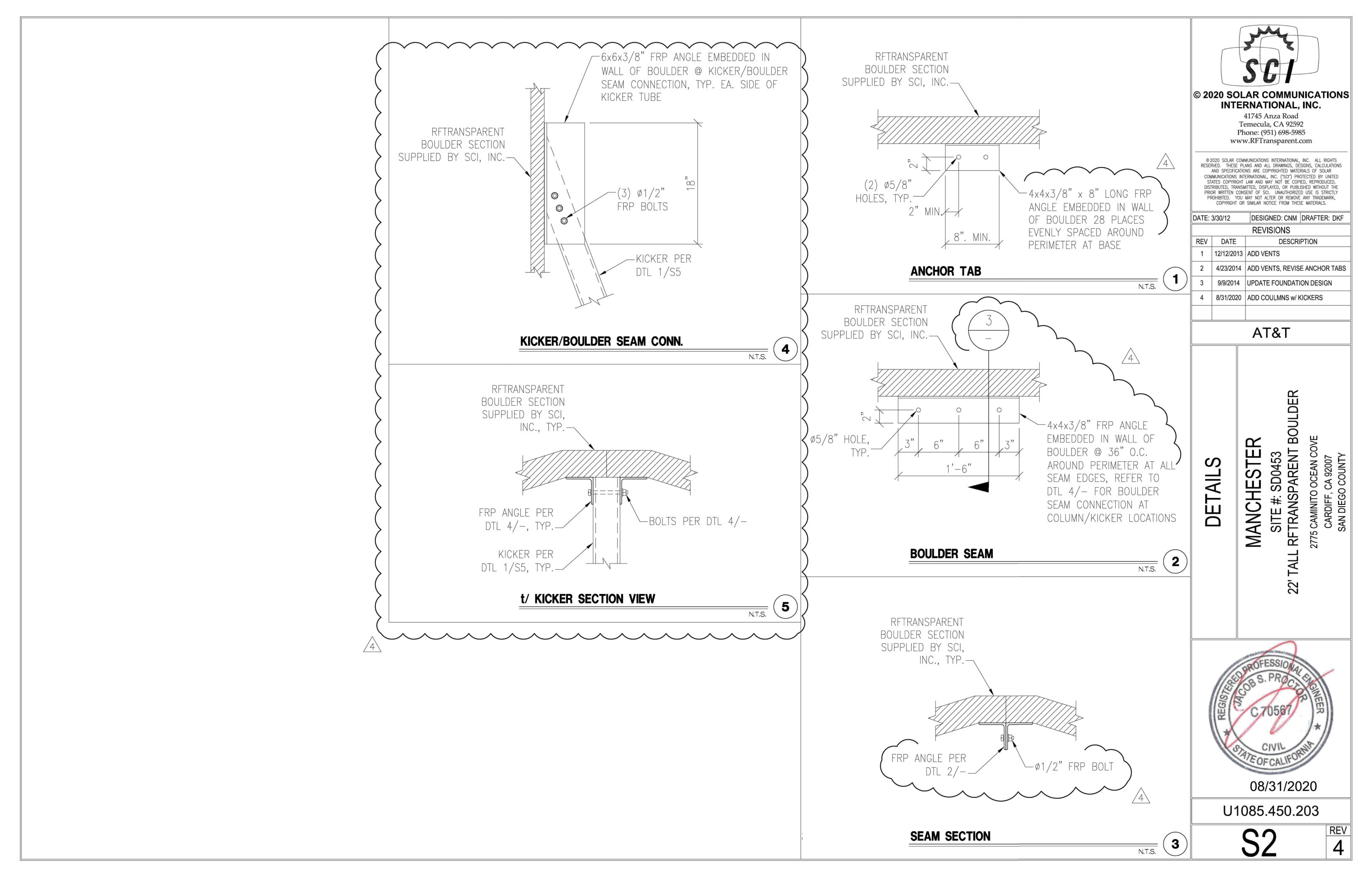
2

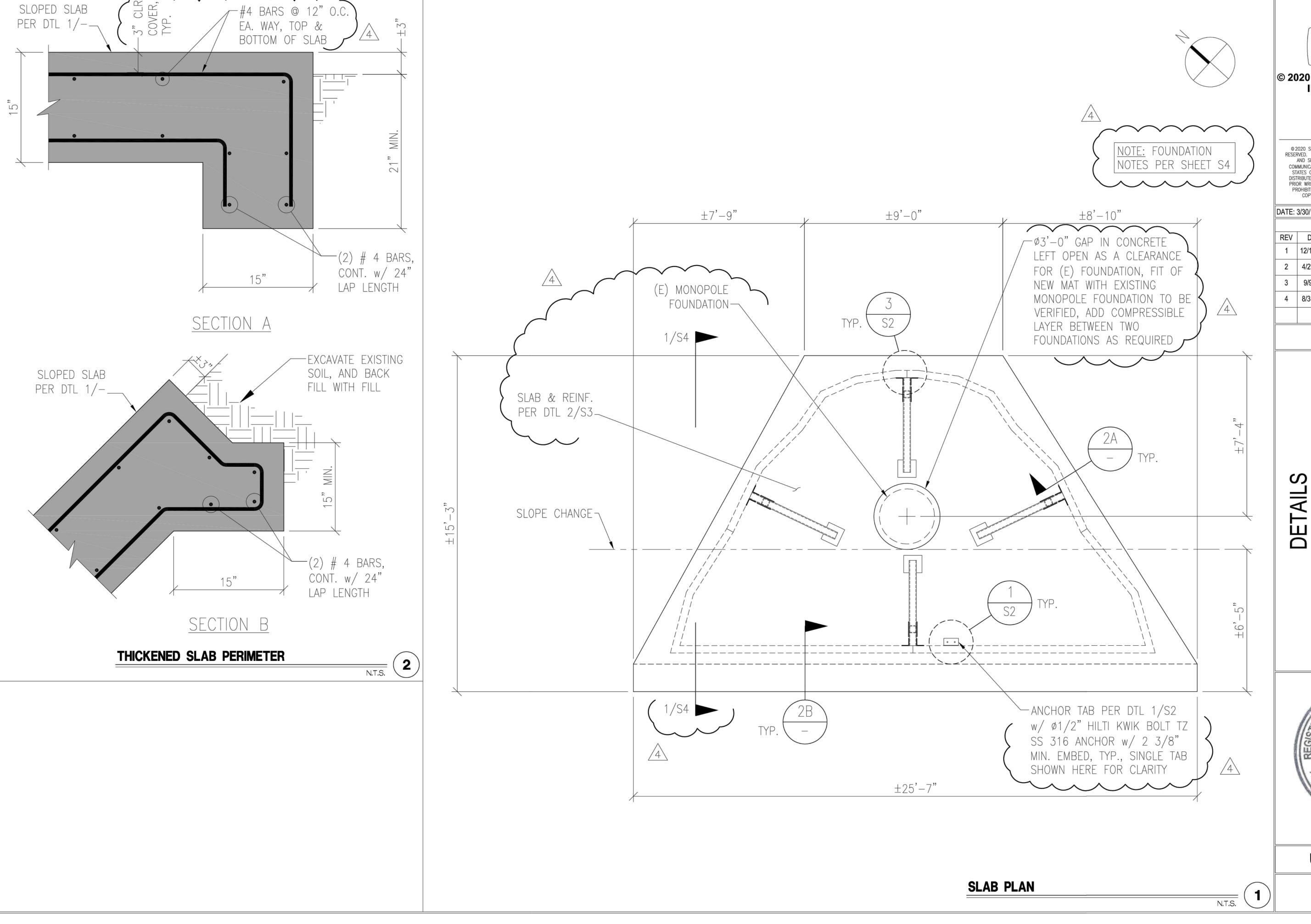


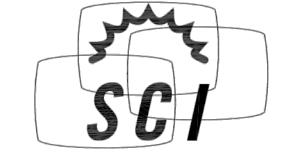


U1085.450.203









© 2020 SOLAR COMMUNICATIONS INTERNATIONAL, INC.

41745 Anza Road Temecula, CA 92592 Phone: (951) 698-5985 www.RFTransparent.com

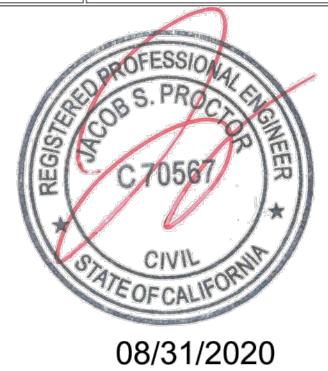
© 2020 SOLAR COMMUNICATIONS INTERNATIONAL, INC. ALL RIGHTS RESERVED. THESE PLANS AND ALL DRAWINGS, DESIGNS, CALCULATIONS AND SPECIFICATIONS ARE COPYRIGHTED MATERIALS OF SOLAR COMMUNICATIONS INTERNATIONAL, INC. ("SCI") PROTECTED BY UNITED STATES COPYRIGHT LAW AND MAY NOT BE COPIED, REPRODUCED, DISTRIBUTED, TRANSMITTED, DISPLAYED, OR PUBLISHED WITHOUT THE PRIOR WRITTEN CONSENT OF SCI. UNAUTHORIZED USE IS STRICTLY PROHIBITED. YOU MAY NOT ALTER OR REMOVE ANY TRADEMARK, COPYRIGHT OR SIMILAR NOTICE FROM THESE MATERIALS.

DATE: 3/30/12			DESIGNED: CNM	DRAFTER: DKF		
	REVISIONS					
REV	DATE		DESCRIPTION			
1	12/12/2013	A	ADD VENTS			
2	4/23/2014	ADD VENTS, REVISE ANCHOR TABS				
3	9/9/2014	UPDATE FOUNDATION DESIGN				
4	8/31/2020	A	ADD COULMNS w/ k	(ICKERS		

AT&T

MANCHESTER

SITE #: SD0453
2' TALL RFTRANSPARENT BOULDER
2775 CAMINITO OCEAN COVE
CARDIFF, CA 92007
SAN DIEGO COUNTY



U1085.450.203

4

FOUNDATION NOTES

1. FOUNDATION DESIGN IS BASED ON THE FOLLOWING GEOTECHNICAL REPORT:

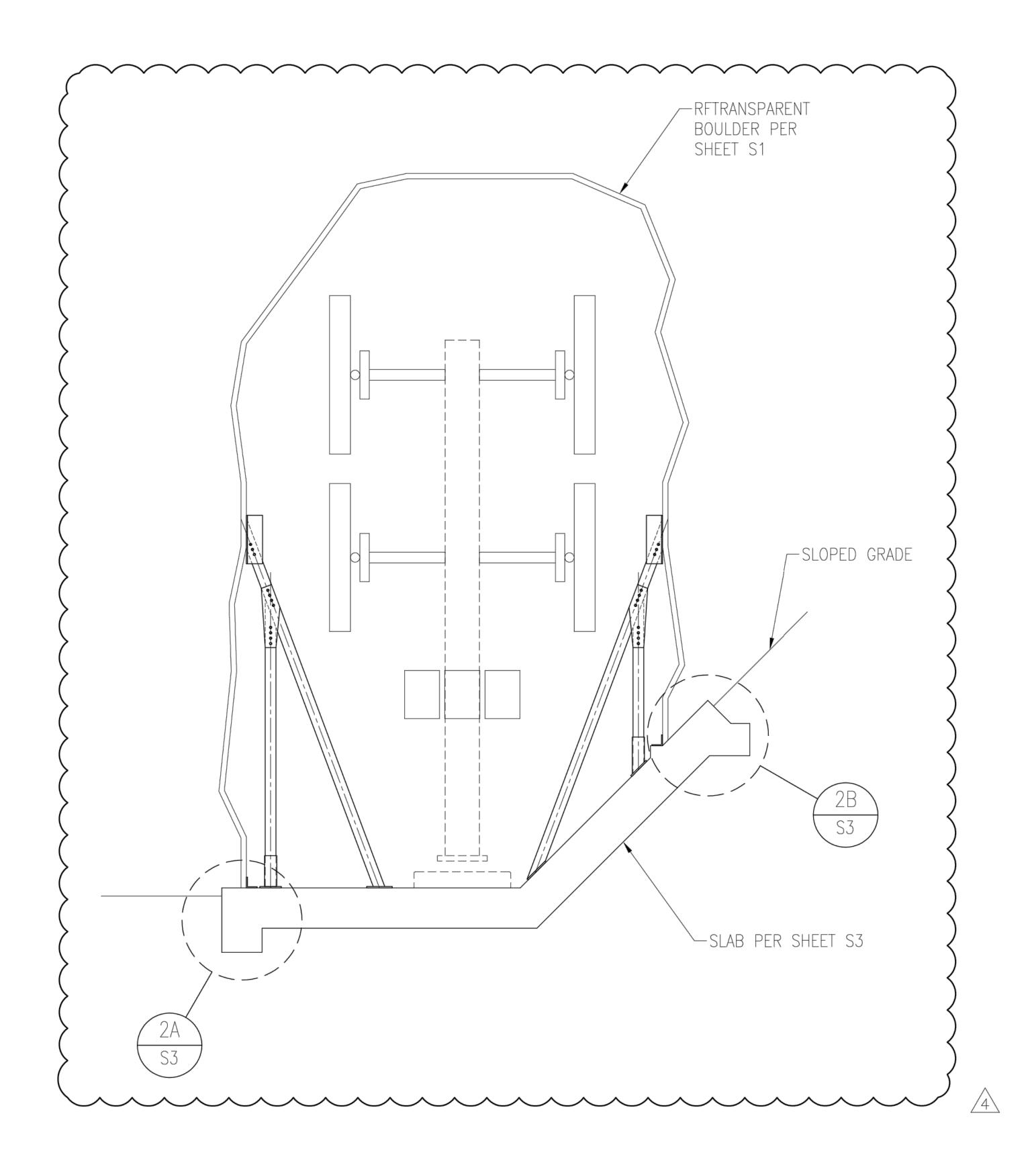
SOUTHERN CALIFORNIA SOIL AND TESTING, INC.

REPORT: 1

DATE: SEPTEMBER 1, 1993

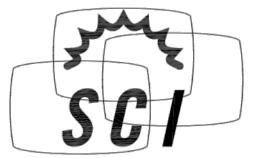
ALL CONCRETE SHALL USE TYPE II PORTLAND CEMENT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS. CONCRETE SHALL HAVE A MINIMUM OF 6% ENTRAINED AIR (WHERE FROST DEPTH > 0"). CONCRETE SHALL HAVE A MAXIMUM WATER/CEMENT RATIO OF 0.50. CONCRETE SHALL HAVE A SLUMP OF 5" MAX. UNLESS OTHERWISE SPECIFIED IN THE GEOTECHNICAL REPORT. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH "THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE," ACI 318-14.

- REINFORCING STEEL SHALL CONFORM WITH THE REQUIREMENTS OF ASTM A-615, GRADE 60. ALL REINFORCING DETAILS SHALL CONFORM TO "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES," ACI 315, LATEST EDITION, UNLESS DETAILED OTHERWISE ON THIS DRAWING CONTRACTOR SHALL USE STEEL WIRE TO HOLD REINFORCING BARS TOGETHER. IF WELDING REBAR IS PREFERRED, SUBSTITUTE A706 GR. 60 DEFORMED BARS.
- CONTRACTOR IS RESPONSIBLE FOR CHECKING AREA FOR UNDERGROUND FACILITIES PRIOR TO EXCAVATING ANY MATERIALS.
- CONTRACTOR SHALL REFER TO SOILS REPORT FOR SITE CONDITIONS AND FURTHER CONSTRUCTION INFORMATION.
- CONTRACTOR SHALL INSPECT AND REMOVE ALL DEBRIS FROM BOTTOM OF EXCAVATION.
- CONTRACTOR SHALL VERIFY ANCHOR BOLT LAYOUT PRIOR TO AND IMMEDIATELY AFTER PLACING CONCRETE. ANCHOR BOLT LAYOUT IS CRITICAL FOR MONOPOLE INSTALLATION.
- 8. CONCRETE SHALL BE CONSOLIDATED USING VIBRATORY METHODS THROUGHOUT DEPTH OF FOUNDATION. VIBRATING LOWER DEPTHS MAY NOT BE ACCOMPLISHED BY TOUCHING REBAR CAGE WITH VIBRATOR.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ADEQUATE CONCRETE COVERAGE OVER REINFORCING BARS. UNLESS OTHERWISE NOTED, CONTRACTOR SHALL USE 3" CONCRETE COVER OVER REBAR. TOP OF FOOTING SHALL BE TROWEL LEVEL AND SMOOTH.
- 10. INSTALLATION OF FOUNDATION MUST BE OBSERVED BY A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER FIRM. GEOTECHNICAL
- ENGINEER TO PROVIDE A NOTICE OF INSPECTION FOR THE BUILDING INSPECTOR FOR REVIEW AND RECORD PURPOSES. 11. CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT FOR INFORMATION REGARDING EXCAVATION, REQUIRED INSTALLATION EQUIPMENT, STRUCTURAL FILL REQUIREMENTS AND ALL OTHER REQUIREMENTS RELATED TO THE INSTALLATION OF THE
- FOUNDATION.
- 12. COMPACTED FILL OVER MAT TO HAVE A MINIMUM UNIT WEIGHT OF 110 PCF. 13. STRUCTURE MAY BE ERECTED 3-DAYS AFTER FOUNDATION IS INSTALLED AND ONCE CONCRETE STRENGTH IS AT LEAST 4000 PSI.



SLAB ELEVATION

N.T.S.



© 2020 SOLAR COMMUNICATIONS INTERNATIONAL, INC.

41745 Anza Road Temecula, CA 92592 Phone: (951) 698-5985 www.RFTransparent.com

RESERVED. THESE PLANS AND ALL DRAWINGS, DESIGNS, CALCULATIONS AND SPECIFICATIONS ARE COPYRIGHTED MATERIALS OF SOLAR COMMUNICATIONS INTERNATIONAL, INC. ("SCI") PROTECTED BY UNITED STATES COPYRIGHT LAW AND MAY NOT BE COPIED, REPRODUCED, DISTRIBUTED, TRANSMITTED, DISPLAYED, OR PUBLISHED WITHOUT THE PRIOR WRITTEN CONSENT OF SCI. UNAUTHORIZED USE IS STRICTLY PROHIBITED. YOU MAY NOT ALTER OR REMOVE ANY TRADEMARK, COPYRIGHT OR SIMILAR NOTICE FROM THESE MATERIALS.

DATE:	3/30/12	DESIGNED: CNM	DRAFTER: DKF		
REVISIONS					
REV	DATE	DESCRIPTION			
1	12/12/2013	ADD VENTS			
2	4/23/2014	ADD VENTS, REVISE ANCHOR TABS UPDATE FOUNDATION DESIGN			
3	9/9/2014				
4	8/31/2020	ADD COULMNS w/ h	KICKERS		

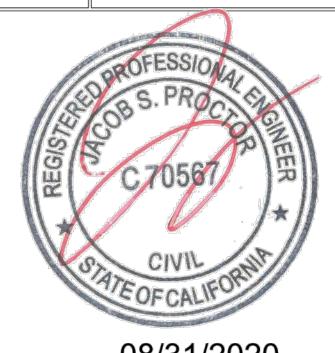
AT&T

DATION

FOUN

#: SD0453 ISPARENT MANC

SITE# 2775 CAMINIT CARDIF SAN DIE



08/31/2020

U1085.450.203

1)

